ESTABLISHED IN 1872

# PAPER TRADE JOURNAL

With Which Is Combined

PAPER

Vol. LXXXVII No. 13 Thursday, Sept. 27, 1928

# General Paper Merchants to Meet in Chicago

## Exceptionally Interesting Program Arranged for Forthcoming Sessions of National Paper Trade Association of United States, to be Held at Congress Hotel, Chicago, October 1 to 3 Inclusive—Charles J. Graham, Well Known Authority on Sales and Distribution Problems, to Address Gathering on Wednesday

The National Paper Trade Association of the United States announces the program for its forthcoming Fall meeting, to be held ot the Congress Hotel, Chicago, Ill., from October 1 to 3, inclusive, as follows:

FINE PAPER DIVISION

Monday, October 1

10:00 A.M. Survey Committee, Room 1112.
10:00 A.M. Efficiency Committee, Room 1114.
11:30 A.M. Clearing-House Committee, Room 6.
2:00 P.M. Administrative and Executive Committee, English and Walnut Room.
8:00 P.M. Board of Directors, English and Walnut Room.

Tuesday, October 2

9:30 A.M. Meeting of Fine Paper Division, Florentine Room.
6:30 P.M. Round Table Dinner, Presidents and Secretaries of local associations, English and Walnut Room.

Wednesday, October 3

10:00 A.M. General Meeting, both Divisions, Florentine Room.

WRAPPING PAPER DIVISION

Monday, October 1

9:30 A.M. Twine Committee and Conference, Room 1170.
9:30 A.M. Gummed Tape Committee, Room 1176.
10:00 A.M. Survey Committee, Room 4.
11:00 A.M. Tissue Committee and Trade Customs Committee, Room 2.
2:00 P.M. Executive Committee, Room 1102.
8:00 P.M. Board of Directors, English and Walnut Room.

Tuesday, October 2

9:30 A.M. Kraft Committee, Room 1170.
9:30 A.M. Bag Committee, Room 2.
10:00 A.M. Survey Forum, Room 6.
2:30 P.M. Meeting of Wrapping Paper Division, Florentine Room.
6:30 P.M. Round Table Dinner, presidents and secretaries of local associations, English and Walnut Room.

GENERAL MEETING

Wednesday, October 3

10:00 A.M. General Meeting, both Divisions, Florentine Room.
2:30 P.M. Survey Forum, Room 6.

A special feature of the general meeting will be an address by Charles J. Graham, president of the American Bolt and Nut Association, under whose auspices was held last June the "National Distribution Conference" for the general discussion of sales and distribution problems. This conference was attended by representatives of the Department of Commerce, the United States Chamber of Commerce, and about fifty trade organizations, together with delegates from approximately three hundred important manufacturing and distributing companies. It was addressed by Charles M. Schwab and other distinguished speakers and was declared by many competent authorities to be the most useful and promising meeting of the kind ever held in this country.

Mr. Graham was the presiding officer of the conference and is a recognized leader because of the remarkable improvements which have taken place and the accomplishments which have been brought about in his industry under his leadership. These accomplishments have benefited both manufacturing and distributing branches of the industry, and Mr. Graham will give an account of the conditions previously prevailing and the methods so successfully used to meet them.

### Completing Paper Bag Plant at Bastrop

Machinery is now being installed in the paper bag plant which International Paper Company is building at Bastrop, La., and the plant will soon be in operation. Of a daily capacity of thirty-five tons of grocery bags, the plant will be owned and operated by Continental Paper and Bag Corporation, a subsidiary of International Paper Company. It is being built in conjunction with one of the two kraft paper mills of the International at Bastrop, and will use a part of the product of that mill in the manufacture of paper bags.

With bag plants at Rumford Falls, Maine; Brooklyn, New York; Wellsburg, West Virginia; Marinette, Wisconsin, and Ottawa, Ontario, the International Paper Company ranks as one of the largest manufacturers of paper bags in the world.

### Wage Agreement Affected in Norway

[FROM OUR REGULAR CORRESPONDENT]

WASHINGTON, D. C., September 25, 1928.—Through the efforts of the Public Mediator an agreement has been reached between Norwegian paper manufacturers and their workers in regard to wages and hours of labor. Both parties have agreed to the maintenance of the present wages and working conditions with certain minor changes. The agrement, which was made for two years, furthermore provides that in case the Central Bureau of Statistics index number for the cost of living in July of next year, shows an increase or a decrease compared with the corresponding month of the current year, either of the parties to the agreement may request new negotiations to change wages accordingly.

# Wisconsin Schools Plan Paper Making Courses

## Comprehensive Program Arranged by H. G. Noyes, State Paper Mill Education Director, and H. G. Menzel, Vocational School Coordinator—Prominent Speakers Invited to Address Classes—Special Course Designed for Maintenance Men

[FROM OUR REGULAR CORRESPONDENT]

APPLETON, Wis., September 24, 1928.—Safety schools which are sponsored largely by paper mills will open their sessions soon in connection with the vocational evening schools at Appleton, Green Bay and Menasha, Wis. These are attended by superintendents, foremen, employees and others interested in cutting down accidents. Menasha will have its own school for the mill population from that city and Neenah, Wis., for the first time. Organization plans have been completed by H. G. Noyes, state paper mill education director, and H. G. Menzel, vocational school coordinator. S. E. Crockett, of the Menasha vocational school, will assist.

Among the companies sponsoring this course are the Banta Publishing Company, Kimberly-Clark Corporation, Menasha Paper Mills Company, Menasha Products Company, Wisconsin Tissue Company, Menasha Wooden Ware Company, and Gilbert Paper Company. As has been customary in past schools, prominent speakers identified with the industries and the safety movement will be invited to appear before the classes. Several hundred men are expected to be enrolled.

In addition to the usual courses in pulp and paper making conducted annually at Appleton vocational school, there will be a special course dealing entirely with pumps. The course is so designed that it will be of great help to maintenance men, especially millwrights and mechanics responsible for the operation and repair of pumps. E. B. Morse, secretary of the Hayton Pump and Blower Company, will be the instructor.

### Value of Bergstrom Estate

The estimated value of the estate of the late D. W. Bergstrom, deceased president of the Bergstrom Paper Company, Neenah, Wis., is $500,000, according to a petition filed in probate court. The exact appraisal has not been completed. Of this amount $50,000 goes to Theda Clark Hospital, of Neenah, and $5,000 to Carroll College, Waukesha, Wis. The homestead and household goods are bequeathed to the widow, Mrs. Sarah H. Bergstrom, and he also gives $5,000 to a sister, Mrs. Marie E. Beckwith, of Tacoma, Wash. The bulk of the estate is divided equally among five children, John N., Willis C., Dedrick W. and Nathan H. Bergstrom, all of Neenah, Wis., and Mrs. Mary McQuarrie, of Minneapolis, Minn.

### Kimberly-Clark Building Enlarged

Remodeling and enlarging of the Kimberly-Clark Corporations office building at Niagara Falls, N. Y., has been completed. The structure is two stories, and with the addition gives ample room for all departments. The maintenance department, men's washroom, operators' headquarters, the employment and first aid departments, and the office of J. L. Sensenbrenner, manager, are on the first floor. The upper story contains the stenographic department, the statistical department, and a girl's rest room attractively appointed.

### News of the Industry

William H. Falatick, manager of the Thilmany Pulp and Paper Company's mill at Appleton, Wis., has been made chairman of the annual Salvation Army drive conducted in his home city. A large organization raises funds for the organization.

Dr. J. B. MacLaren, chief surgeon of the Kimberly-Clark Corporation, has been appointed by the Wisconsin Industrial Commission as a member of a special advisory committee which will deal with the hazards arising from toxic fumes and dust in places of employment. His outstanding service in 1919 as a member of the special committee on sanitation won him this appointment. Dr. MacLaren lives at Appleton, Wis.

After devoting sixty-seven years to the pulp and paper industry, Michael Ward, employed at the Mosinee Paper Mills, Mosinee, Wis., has decided to retire. He is 82 years old. Mr. Ward plans to visit Europe and especially the paper mill at Lancashire, England, where he started work at the age of 15.

In a deal completed recently, the Continental Bag and Paper Company, of New York, sold a tract of 1200 acres of hardwood timber land in Wisconsin to the Shawano Lumber Company. The timber was located near the village of Argonne. The lumber company desired the timber so as to keep its very large saw mill in continuous operation for a period of at least five or six years.

Announcement is made of the marriage of Arthur S. Wakeman, a department manager of the Fox River Paper Company, of Appleton, Wis. His bride is Miss Lorraine Cheesman, of Burlington, Wis.

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### C. W. Shartle Visits Ancestral Home

Charles W. Shartle, formerly president of the Shartle Brothers Machine Company, of Middletown, Ohio, and now head of the Brown-Bridge Mills, Inc., Troy, Ohio, returned to New York last week after an extensive European tour, during which he inspected many paper mills. Since his return he was a welcome visitor to the PAPER TRADE JOURNAL offices.

During his trip abroad, Mr. Shartle visited Linlithgow, Scotland, the home of his maternal ancestors and found the grave of his great-great grandfather, Thomas Kilgour, in the local cemetery. The inscription on the tomb stone reads as follows:

"In memory of Jean Kilgour, daughter of Thomas Kilgour, paper manufacturer, Loch Mills, who died August 28, 1813, aged 4 years, and of Gavin, his son, who died January 13, 1820, aged 4 years; also Jean Dun, his wife, who died December 29, 1830, aged 63 years. The above Thomas Kilgour died January 15, 1840, aged 70 years."

It may be seen from the foregoing that Mr. Shartle's love and aptitude for the paper business is an inherited quality. In fact, Mr. Shartle's ancestors even more remotely were paper makers, but the inscription presented above is the most recent evidence that he has collected that he comes naturally by his fondness for anything that has to do with the making of paper.

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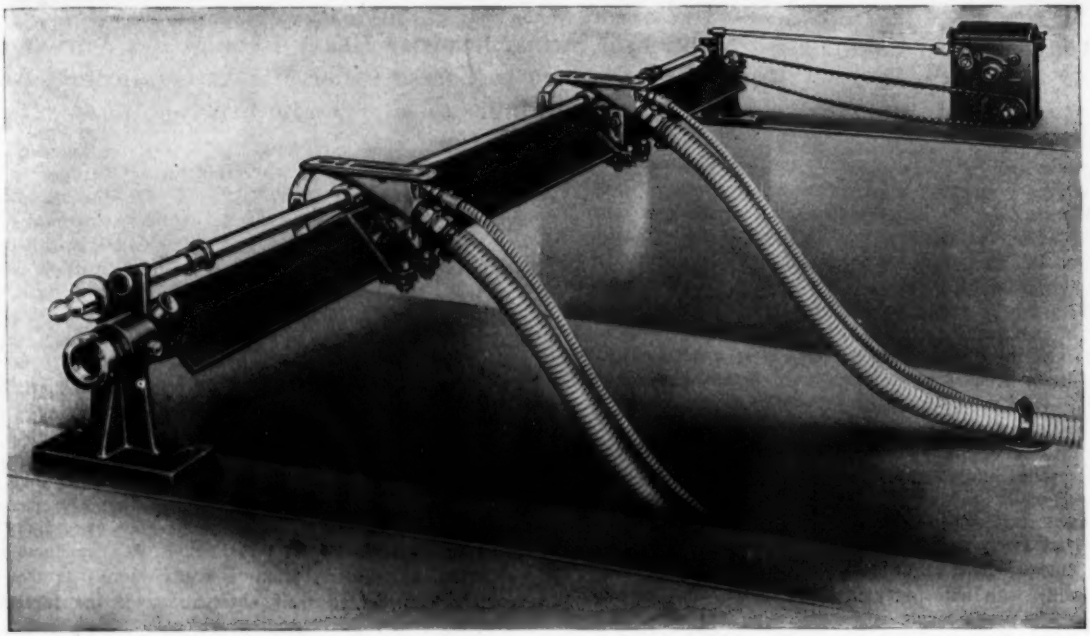
### Storm Blows Down Wall at Mechanicville Mill

[FROM OUR REGULAR CORRESPONDENT]

MECHANICVILLE, N. Y., September 24, 1928.—Destruction of one of the new concrete foundation walls at the plant of the West Virginia Pulp and Paper Company, during a severe storm this week will not interfere with the work now under way in connection with the company's plans for enlarging the local plant. The wall blown down during the storm, one of the worst to hit this section in recent years, was fifteen feet high and in course of construction. Steps were taken by the contractors to rebuild the wall immediately.

Work on the expansion program of the West Virginia Company is progressing rapidly. An addition to the machine room is under way and will be roofed before the cold weather.



# A Mill that has five says:

**"We have had very good luck with the five Vickery cleaners and they have worked out very satisfactorily. One of the good features of this cleaner is that it requires practically no attention.**

**Before we installed these conditioners, it was necessary for us to change our press felts every week due to their filling up but since we put the cleaners on, we now run our press felts from five to seven weeks without change."**

***Ask us to show you exactly what the Conditioner can do for you.***

# *The* Vickery Felt Conditioner

BIRD MACHINERY

**BIRD MACHINE COMPANY : : South Walpole, Massachusetts**

2327

# Paper Demand Fairly Active In Philadelphia

## Vigorous Political Campaign, Now in Full Swing, Leads to Heavy Request For Various Lines of Paper—Volume of Business Transacted in Coarse Paper Market Diminishes, Although Wrapping Paper Continues to Move Quite Freely

[FROM OUR REGULAR CORRESPONDENT]

PHILADELPHIA, Pa., September 24, 1928.—While the majority of paper grades were less active in the past week, a few seasonal specialties held to the larger volume of shipments experienced with the advent of September. While some mills continue to operate on full time there are a few still confined to the five day week with operations at from 75 to 90 per cent. Mills featuring the wrapping and specialties grades are more active than the fine paper manufacturers. Tissue paper plants are slower as the local markets are flooded with offerings after a steadier trend in the month of August when prices were firmer than for many months.

The fine paper market has been more lively in a few grades needed for the advertising industry and for specialties in stationery supplies and engravers stocks. With the political campaign well under way many lines of papers are more active as both parties start vigorous mail campaigning and papers used at the polls are freely purchased in the local markets and for State requirements. Wholesale demand for book papers continues to hold steadily with numerous purchases under contract for the balance of the year's supply to the publishing and larger printing concerns. News print holds to the quotations of the past six months with demand steady. While the volume of business diminished in the week the coarse paper market maintained a fairly active position with a tendency to greater demand for seasonally active grades and wrapping papers.

All papers for the box making trades are active with the preparation for the winter's supply in clothing manufacturers' sizes and for the holiday containers that are extensively used by many industries. The cigar manufacturers have been heavy buyers of fancy containers and wrappings in glassines that will be used for the holiday packings of cigars. Many food industries are also buying more freely of holiday cartons and glassines, parchments and greaseproof papers to be imprinted with Christmas designs. As the paper bag market broadens there are prospects of price advances with the late Fall. Since the advance of 5 per cent on September 1 the bag industry has been more active and a similar rise in values is looked for in the not far distant future.

Although accumulations of paper stock grow scarcer the local wholesale trade has become draggy with absence of mill buying on the broader scale of the early month. Though the market has become less active the prices of the entire list are holding firmly and dealers indicate a further advance should demand suddenly increase owing to the scarcity of all grades but specially for book papers and similar high priced stocks that so far this year have been in heavy demand and short in stocking.

### Paper Trade Association Golf Tournament

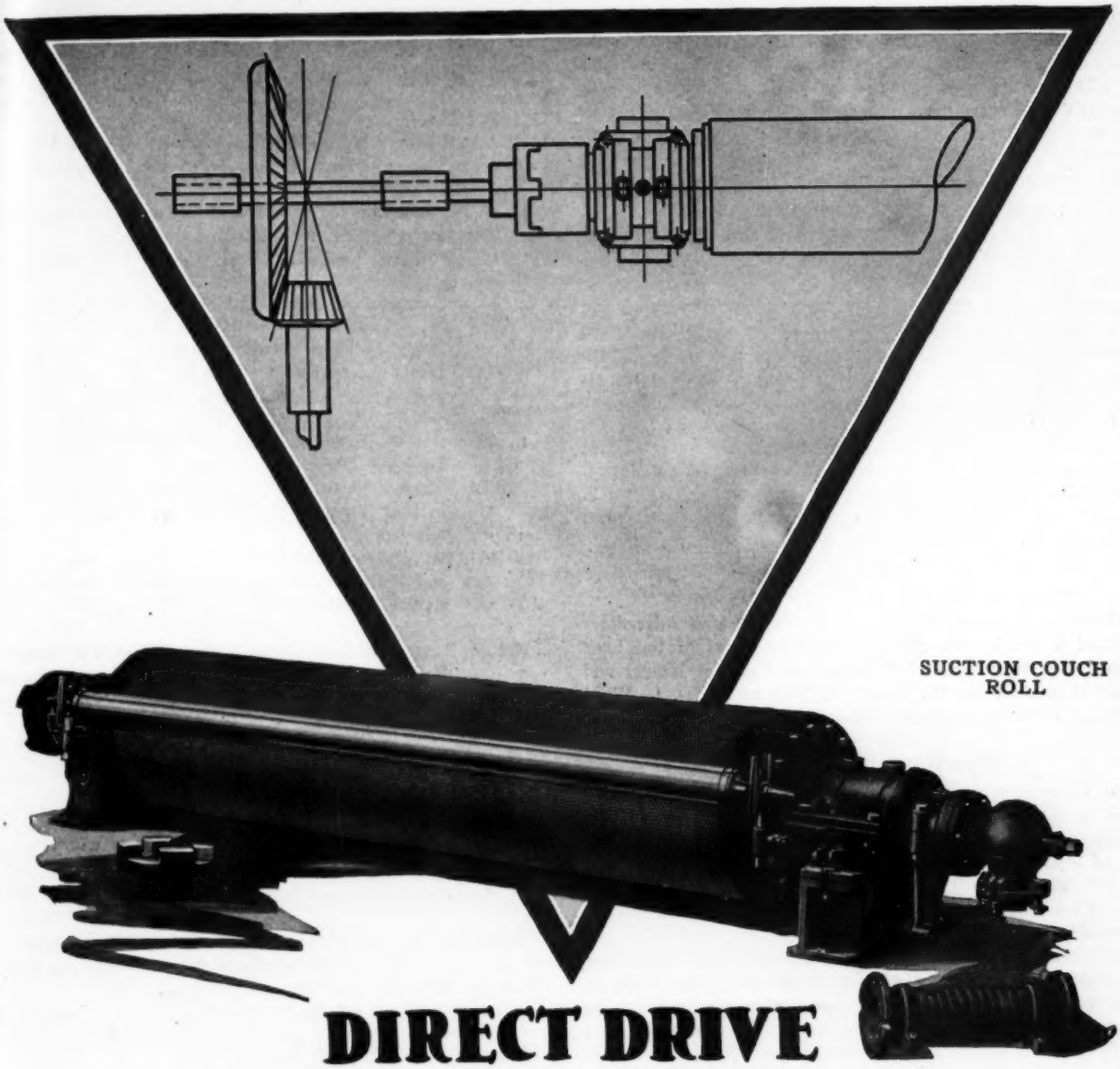
Though Jupiter Pluvius spread a wet blanket over the members of the paper trade who joined in the Annual Golf Tournament held during the week at the Manufacturers Country Club, at Oreland, near Philadelphia, it did not prevent the program from being carried out by the enthusiastic associates of the local industry and those from out of town. Though wind and rain made inroads upon the playing the members nevertheless bravely buffeted the stormy weather with the determination to play for the winning trophies on Wednesday, the second day scheduled for the important finals of the golfing contest. With brighter weather conditions on Tuesday, the 32 trade associates in the tournament teed off in the early morning. After a brisk contest on the expansive green of the Manufacturers Club, luncheon was served in the Club House. The afternoon was devoted to match play classes on handicap. The big event of the Tuesday program was the dinner served in the evening when the most interesting of sessions brought together in round table discussions of high lighted opinions expressed upon the foreign situation as it relates to the German manufacturers and their possible inroads upon the American markets. This interesting phase of the paper trade was introduced by President S. L. Willson, of the American Writing Paper Company, a foremost authority on paper making in this country and an official of the American Pulp and Paper Association.

In an outline of paper conditions in the German markets as he found them on his recent trip, President Willson gave a vivid and informative treatise on the paper manufacturers of that nation, going thoroughly into the possibilities of their effects upon the American industry and the likelihood of competition emanating from that source. As he completed the review of paper making in Germany in these post war days he gave opportunity to his fellow associates to discuss the situation with frankness and the topic developed into a forum of much interest as the various members high lighted their observations of the foreign field. Chairman Arthur B. Sherrill, of the golfing committee, brought much merriment to the diners in humorous quips as he introduced his fellows during the evening.

In the Wednesday schedule, with a torrential rain and old Boreas breezing the players across the green, there was keen competition and much enthusiasm, as the following made their winnings in the 8's, low net and kickers handicap finals, awards being made to these players: First Eight, Roger Taft; 2nd Eight, Willard Pringle, Seaman Paper Company; 3rd Eight, Fred Hastings, American Writing Paper Company; and 4th Eight, F. A. Benedict, Jessup and Moore Paper Company. Winners of the Defeated Eight: 1st Eight, Henry Bigelow, Atterbury Brothers, New York; 2nd Eight, S. L. Willson, American Writing Paper Company, Holyoke; 3rd Eight, N. J. Patterson, Parsons Paper Company, Holyoke, Mass. and 4th Eight, Spencer Holden, Crocker McElwain Company, Holyoke. Winning the Low Net Score, Roger Taft, Hammermill Paper Company, Erie, Pa., recorded gross 76, handicap 5 and net 71. Henry Bigelow was awarded the Kickers Handicap. A variety of high class gifts were listed in the awards.

### U. S. Gypsum Company To Build Paper Mill

As the first units of the extensive eastern plant of the United States Gypsum Company are put under construction it is announced that a large paper board mill will be included in the plans for the $1,250,000 building program which is now in course of operation on the site at 58th street and the Schuylkill River. Work of demolishing the buildings now on the site was begun last week under the direction of the local manager of the Company, R. S. Slattery, who has been in charge of sales in the Quaker City distribution offices. Actual building operations will commence as soon as the site is cleared. The tract on which the group of buildings will be constructed is 7½ acres and part of it was developed last year with a warehouse structure. Immediately on completion of the building program, stone will be shipped here from Nova Scotia and the manufacturing of the company's line of plaster boards will commence with the production, including such well known makes as Sheet Rock, Pyrobar and later the paper board mill to be devoted to production of other paper building boards made under the United States Gypsum Company brands. The capacity of the Philadelphia plant will be



SUCTION COUCH ROLL

# DIRECT DRIVE
## A Kilberry Development

DIRECT connection of the suction roll to couch or press drive is an exclusive, patented feature of the Kilberry Roll. No gears are used therefore the power loss and difficulties encountered with same are eliminated.

The Suction Box in the Kilberry Roll is concentric to shell, easily adjusted and removed, and is carried in ball bearings within steel journals. The shell of the Press Roll is drilled with holes in a spiral-staggered pattern,—another Kilberry Development.

*Get the facts and compare values.*

Our Products Meet Our Promises

**DOWNINGTOWN Manufacturing Company Downingtown, Pa., U. S. A.**

CAN. REP. FOR KILBERRY SUCTION ROLLS CHAS. WALMSLEY & CO. CANADA LTD. MONTREAL, QUE.

300,000 to 350,000 tons per year. It will be shipped over the Reading Railroad siding adjoining the site, extending from the Schuylkill River to the Reading tracks. While the Philadelphia site will house the fifth of the paper board mills of the company it is the third Eastern plant to be devoted to production of plaster boards. There are 25 plants operated in the West with headquarters at Chicago. The paper mills are located in Oakfield, N. Y.; Lancaster, Ohio; Gypsum, Ohio and Kansas City, Mo.

### Quaker City Paper Company To Move

Larger and more modern quarters have been acquired by the Quaker City Paper Company, at 303-311 Vine street, to replace the old location just around the corner at 70 North 2nd street. The firm has been established for the past quarter century and has at its helm Joseph B. Mitchell, who is one of the best known of wrapping paper men and a veteran in the industry. Three floors have been acquired in the new location, basement, and first and second floor being devoted to the warehouses and offices of the firm. There will be provided more commodious quarters for the various lines of bags, wrapping papers and specialties carried by the company. The members of the firm are: President, Joseph B. Mitchell; Vice President, George Geiss; Treasurer, William F. Killgour, and Secretary, W. B. Killgour. Previous to removal to the Second street address, the firm was for more than twenty years located at 6th and Commerce Streets.

### George W. Ward At Mail Advertisers Dinner

When the officers and directors of the Direct Mail Advertisers Association met in this city last week as guests of the Poor Richard Club at a dinner held in the club-house at Juniper and Locust streets, George W. Ward, president of the D. L. Ward Company, represented the paper committee on the directorate.

## Superintendents to Meet

The Connecticut Valley Division of the American Pulp and Paper Mill Superintendents' Association will meet at the Hotel Nonatuck, Holyoke, Mass., next Saturday, September 29. Business of importance, including report from Convention Committee, report from Committee on Permanent Quarters, and the appointment by the Chairman of a Nominating Committee for officers for the ensuing year, will be taken up.

The Northeastern Division of the American Pulp and Paper Mill Superintendents' Association meets Saturday, October 6, at St. Johnsbury, Vermont. A golf tournament will be held Friday, October 5, and unusually interesting features have been arranged for the business session on Saturday, October 6.

## New York Superintendents to Meet

The tentative program for the meeting of the Northern New York Division of the American Pulp and Paper Mill Superintendents Association at Niagara Falls, N. Y., Saturday, October 13, is as follows:

10:00 A.M. Register Mezzanine Floor, Hotel Niagara.

11:00 A.M. Visit Cliff Paper Company for practical demonstration of automatic control of moisture.

12:30 P. M. Luncheon for Superintendents and their wives in ball room of Hotel Niagara.

1:30 P.M. Business Session in Coffee Shop, Hotel Niagara.

SUBJECTS:

Automatic Control of Moisture—Atlantic Precision Company.
Felts—Lockport Felt Company.
Wires—Linsday Wire Company.
Size—Paper Makers Chemical Company.
Sulphite—Lincoln Mills, Ltd.
Board—Fred J. Rooney.
Drying of Paper—M. J. Argy.

6:30 P.M. Informal Banquet for Superintendents and their wives in Ball Room of Hotel Niagara, followed by entertainment.

9:30 P.M. Entire party board I.R.C. street cars at corner of First and Falls streets (one block north of hotel) for a special illumination trip.

LADIES

2:00 P.M. Busses will be in front of Hotel Niagara to transport ladies to Old Fort Niagara and return. The Old Fort has been restored and this will be an enjoyable trip.

## Caukenell Bag Co. Organized

[FROM OUR REGULAR CORRESPONDENT]

RICHMOND, Va., September 22, 1928.—A new business firm, the Caukenell Bag Company, has been organized in this city and will begin the manufacture of paper bags in the plant formerly occupied by the Richmond Corrugated Paper Company at the foot of Sixth street.

Floyd Kent, prominent business man of this city, will head the new concern, which will employ about fifty workers and begins with a capitalization of $50,000 paid in.

Modern machinery for the manufacture of paper bags of all kinds has been purchased for the plant which is expected to reach capacity operation within six months' time.

GLAZED AND FANCY PAPER MANUFACTURERS ASSOCIATION
207 Dunmoreland Street, Springfield, Mass.

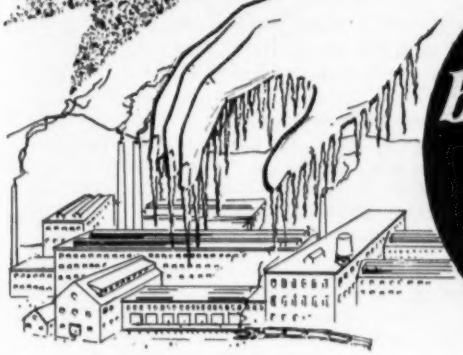
TONNAGE REPORT FOR JULY, 1928
Figures in pounds, and sheets 25x40

| Reports made by..... | | 9 mills | | 11 mills | | 8 mills | |
|---|---|---|---|---|---|---|---|
| Class of Paper | No. of mills reporting Shipments | Made during month Sheets | Pounds | Shipped during month Sheets | Pounds | On Hand end of month Sheets | Pounds |
| COATED PLATE | | | | | | | |
| White ..... | 6 | 547,874 | 32,409 | 1,963,925 | 404,423 | 518,194 | 31,501 |
| Colors ..... | 10 | 2,210,616 | 150,093 | 2,226,457 | 229,213 | 3,926,891 | 304,528 |
| COATED FRICTION | | | | | | | |
| White plain ..... | 7 | 3,093,680 | 213,196 | 3,216,599 | 232,115 | 1,803,716 | 171,735 |
| Colors plain ..... | 9 | 3,123,795 | 221,781 | 3,073,462 | 239,683 | 8,551,553 | 788,295 |
| COATED FLINT | | | | | | | |
| White plain ..... | 5 | 162,419 | 16,713 | 455,834 | 55,216 | 716,872 | 81,082 |
| Colors plain ..... | 5 | 305,887 | 31,664 | 371,519 | 46,555 | 2,383,961 | 284,960 |
| COATED PAPERS | | | | | | | |
| White embossed ..... | 6 | 382,734 | 35,541 | 678,239 | 72,343 | 229,898 | 16,034 |
| Colors embossed ..... | 10 | 2,688,324 | 250,551 | 3,287,444 | 363,852 | 8,048,835 | 1,012,080 |
| Printed fancy ..... | 5 | 350,689 | 38,634 | 953,288 | 167,358 | 2,353,327 | 308,801 |
| UNCOATED | | | | | | | |
| Printed or decorated..... | 4 | 702,930 | 61,885 | 784,166 | 72,331 | 1,255,893 | 114,666 |
| CLOTHLINED | | | | | | | |
| or Reinforced ..... | 5 | 211,091 | 79,700 | 241,348 | 91,311 | 349,244 | 130,892 |
| TOTALS ..... | 11 | 13,780,039 | 1,132,167 | 17,252,281 | 1,974,400 | 30,138,384 | 3,244,574 |
| July, 1927—same mills..... | | 12,058,507 | 1,109,467 | 18,474,147 | 2,050,035 | 20,839,236 | 2,419,264 |
| Increase or decrease (—)..... | | 1,721,532 | 22,700 | —1,221,866 | —75,635 | 9,299,148 | 825,310 |

Reported average number of days orders ahead—6.5 Reported average working days in month—20.25.

LEONARD I. HOUGHTON, Secretary.

# and again—this coming winter



*The mills that can best afford to waste heat are the mills that will save it!*

*It is significant that the mills that maintain profitable production are the mills that we are proud to list as operating*

# Briner Economizer

*Licensed Under Patents of E. A. Briner and John E. Alexander*

Today, more than ever before, it requires foresight, courage and keen judgment to build and maintain ample profit in paper making. Legitimate operating expense must be met. But by investing money to save more money—a margin of safety is created to insure necessary profit, from the same volume of production.

Briner Economizers actually pay for themselves with the savings they effect. And these savings continue after cost of apparatus is written off. The heat units in waste vapor are reclaimed and used to heat the air supply. This results in huge savings of steam, leveling peaks in boiler load, and lowering of operating costs.

**Briner Economizers Prove a Sound Investment That Pays Handsome Returns by Way of Profitable Production**

## J. O. ROSS ENGINEERING CORPORATION

208 W. Washington Street, CHICAGO — Main Office—30 E. 42nd Street, NEW YORK — 303 Lumbermens Bldg., PORTLAND, ORE.

**ROSS ENGINEERING OF CANADA, LIMITED**

NEW BIRKS BLDG., MONTREAL

**ROSS SYSTEMS**

HEATING—VENTILATING—DRYING

# Chicago Paper Market Shows Improved Trend

## Demand for Various Grades of Fine Papers Continues to Expand—Coarse Paper Merchants Optimistic Over Outlook for Last Quarter of Year—Position of Paper Board Market Exceptionally Strong—Book Paper Active, With Prices Firm

[FROM OUR REGULAR CORRESPONDENT]

CHICAGO, Ill., September 24, 1928.—Crisp fall weather continues to improve the paper situation in Chicago. Demand is more brisk and fall buying is reflected in an increase in direct mail advertising. The fine paper lines are considerably improved and may be considered the bright spot of this week's reports. Book paper is active, with prices firm, while the board market remains unchanged and in an exceptionally strong position, with demand reported good in every grade. The last quarter of 1928 will probably be the best of the entire year as far as wrapping paper is concerned. Wrapping paper merchants are viewing the coming three months with plenty of optimism and desire to place this market on an excellent basis. Viewing the markets as a whole one still finds, according to reports, that production runs very heavy with the margins of profits small and competition keen.

### Paper and Twine Houses Merge

An announcement of interest to the paper and cordage industry is the news of a merger recently effected between the Pilcher-Hamilton Company and Daily Brothers, both of Chicago—the merger to become effective October 1. The name under which the merged companies will operate will be the Pilcher-Hamilton-Daily Company with general offices and warehouse at the present Pilcher-Hamilton location at 349 West Ontario street, Chicago. Under the merger John T. Daily becomes an officer and director of the new company and will also be manager of an extensive cordage and twine department. There will be no changes in the executive staff of the Pilcher-Hamilton Company.

The merger is particularly logical in that the Daily Brothers sales organization will be strengthened by being placed in an advantageous position from the standpoint of the sale of paper while the Pilcher-Hamilton sales force will likewise be placed in a stronger position from the standpoint of the complete line of twine and cordage behind its sales efforts.

The Pilcher-Hamilton-Daily Company will be the largest wrapping paper supply distributors in the city in which they operate as a result of the merger. They will cater exclusively to industrial consumers and will be exceedingly effective in the field by reason of an aggressive, competent and well managed sales force of 21 men together with the combined experience of the merged companies in their respective fields.

### Salesmen's Final Golf Event

The final golf event of the season for the Salesmens Association of the Paper Industry was held Thursday, September 13, at the Wilmette Country Club, Wilmette, Ill. It was a gala affair from every angle with a large turnout of 41 salesmen and guests taking part in the par shooting contest. Each of the five golf events during the summer have been very popular with the salesmen even though the last event copped the prize from an attendance standpoint.

The winners in the day's shooting were as follows: Low gross won by Warren Moore, Brown Company; low net by Clarence Sheldon, Whitaker Paper Company; low putts for the eighteen holes, Tom Willis of Willis & Weber, Kansas City, Missouri; low net for the first nine holes, Jim Armstrong, Cudahy Packing Company; low net for the second nine was a tie between Ben Babbitt of the Brown Company and Corval Earle, of Birmingham & Prosser, with the former winning the prize on the toss up. Phil Howard, of the *American Paper Merchant*, won the honors on low putts for the first nine, with Walter Cox of the Paterson Parchment Paper Company winning the prize for low putts on the second nine. A special blind bogey prize donated by Phil Howard was won by Sam Boyd of the International Paper Company.

The golf competitors are now ready to hide their sticks and put all their energy into making the weekly meetings of the Association a success from every standpoint. They got away to a good start last Monday when Dr. Gordon Craig Stewart proved an excellent and most interesting drawing card.

### Danville Mill Begins Operations

What promises to become an important new source of news print paper, as well as a source for other grades of paper began operations recently, when the Cornstalk Products Company, of Danville, Ill., began to operate its first factory for turning thousands of tons of cornstalks into valuable cellulose. The cellulose is to be shipped to Eastern factories where the processes of converting the raw material into finished products are already in operation. The Danville *Commercial-News* sent some of the cellulose to a paper mill in Michigan to be converted into news print and it will be used in an edition celebrating the new market discovered for the benefit of the farmers.

### Harper Leech to Address Salesmen

The Salesmen's Association of the Paper Industry plans an exceptionally interesting session for the second day of the meeting of the National Paper Trade Association, here in Chicago. Scheduled for 12:30 p.m., Tuesday, October 2, at the Congress Hotel, the feature of the program will be an address by Harper Leech, prominent financial writer of the *Chicago Tribune*. The meeting will be open to every one, regardless of business connections, and the reputation of Mr. Leech is sure to draw an exceptionally large crowd at this big event.

### Milwaukee Paper Merchants Entertained

Ten members of the Milwaukee Association of Wrapping Paper Merchants were guests of the Chicago Paper Association at an evening meeting held at the Bismarck Hotel, Tuesday, September 11. The visitors were very much interested in the program of better business being undertaken by the Chicago group and are seriously considering joining the Chicago Paper Association in a unified study of problems affecting both bodies and directed by a nationally known association of engineers who are to be chosen to assist the Chicago group in carrying out its plans.

Leo Altholz, president of the Chicago Paper Association, has adopted a splendid plan of keeping members informed of just what is going on in the organization. He is sending out a series of letters telling of trade conditions and trade practices and each one is of sufficient value to be read with interest by any one connected with the paper industry. A recent letter revealed the fact that the association is increasing its net profit over 1926 sufficiently to bring the figures near the 5 per cent net that the organization is working for. All of the letters refer to the value of upright, business like and honest trade procedures that cannot help but be of material benefit to the organization of which Mr. Altholz is president.

### Paperboard Industries Meeting

The Paperboard Industries Meeting held in Chicago on September 19 and 20 had a very satisfactory attendance and some interesting and valuable sessions were held at the Palmer House, headquarters of the organization, during its two day program. A special invitation to manufacturers of suit boxes to attend the

# SLASHING TIME!

## with the New NOBLE & WOOD PRE HYDRATION SYSTEM

**2 to 3 minutes to fill a beater... and 9 LESS MEN**

A New England mill, noted for its high quality product, has cut its beater furnish time to from 2 to 3 minutes and eliminated 9 men from this operation since installing this revolutionary system!

Not only slashing time .... but labor .... costs .... power .... overhead .... extra operations .... and turning out stronger, better finished paper!

A big contract .... but this new system is filling it .... right now .... in mills where it has been thoroughly tested for a long time before we were ready to make this public announcement.

A flexible system .... that takes any grade pulp .... direct from the unloading truck, if you wish .... breaks down and saturates the fibres without changing their structure, delivers the stuff to the beaters at any desired consistency and so completely hydrated that a considerable part of the beating is eliminated.

Utilizes Sundays, holidays, idle time .... without attention.

Sounds enthusiastic .... but we *are* enthusiastic .... and you will be, too, when you get all the facts. Let us tell you all about it .... WRITE!

**NOBLE & WOOD MACHINE COMPANY**

Hoosick Falls — New York

meeting of the Folding Box Group, brought an encouraging response, while the report of the association's special committee appointed to make recommendations with respect to a suggested trade practice conference before the Federal Trade Commission was also received with much interest.

### News of the Trade

Stock sizes and weights in standard mill grades, together with price lists in effect September 15, have recently been sent out by the West Virginia Pulp and Paper Company, 732 South Sherman street, Chicago. Accompanying the list were samples of each kind of paper listed—proving a very effective method of interesting the prospective consumer in specific grades of paper.

S. W. Fleet, formerly connected with the mills of the Albemarle Paper Company, is now located in Chicago as an addition to the sales force here, under the direction of John Burrus, a change made necessary by increasing business.

Berkshire Papers, Inc., has just moved into new offices at 461 West Erie street. This move was made to obtain larger quarters which were not available in the limited space at the former location. This company now has its offices in the same building in which it has carried its paper stock for some time. The telephone number was also recently changed to Whitehall 6161 to make available a greater number of trunk lines than could be obtained with the former number. A recent addition to the various grades of bond paper carried by Berkshire Papers, Inc., is Wall Street Bond, "the paper everlasting" a 100 per cent rag sheet made by the Fox River Paper Company.

M. A. McNulty, treasurer of the McNulty Paper and Twine Corporation, of 535 West Chicago avenue, Chicago, has been confined to St. Anthony's Hospital, having had a major operation performed last Monday. He is progressing very nicely.

## Start Work on Behr-Manning Expansion

[FROM OUR REGULAR CORRESPONDENT]

WATERVLIET, N. Y., September 24, 1928.—The Morton C. Tuttle Company, mill engineers and contractors in charge of the expansion program of the Behr-Manning Corporation broke ground this week for the large main addition to the plant. With the beginning of work on this building the entire expansion program outlined recently is under way. Other buildings in course of construction are a large office building, a warehouse, a machine shop and boiler house. These structures with the present Manning plant, which was erected two or three years ago, will give the Behr-Manning Corp. one of the most modern groups of mill buildings in this section. The company expects to be in a position by spring to increase the number of workers to 1,000.

The program of the Tuttle Company calls for completion of the entire contract before spring. The new office building will be ready for occupancy in a few weeks when the Manning Green Island offices and the Brooklyn office of the Behr Company will be consolidated here. The office building, on which work was started first, is rapidly nearing completion. The other buildings now under construction will be completed before the cold weather.

The original mill of the Manning Abrasive Company is at 10th avenue and 25th street within the Watervliet city limits while the main factory addition for which ground was broken this week adjoins the Manning plant but is situated in the town of Colonie, just over the city line.

## Swedish News Print Output Increases

[FROM OUR REGULAR CORRESPONDENT]

WASHINGTON, D. C., September 26, 1928.—Output by the Swedish news print mills during July amounted to 20,536 metric tons against 15,799 tons in June and 17,312 tons during the corresponding July of last year.

With the exception of an increase in the price of bleached sulphite pulp, quotations on Swedish pulp and papers underwent no change during the first half of August.

## Paper Production for July

Production of all grades of paper in July totaled 533,381 tons as compared with 581,792 tons in June and 617,835 tons in May, according to identical mill reports to the American Paper and Pulp Association.

Production ran about 78 per cent of capacity in July as against 82 per cent of capacity in June. The total tonnage produced ran about 8 per cent below that of June.

The total production of paper for the first seven months of 1928 was 4,040,668 tons as compared with 3,925,229 tons during the same period of 1927, a 2 per cent increase. Shipments for the first seven months of 1928 were 3,991,236 tons as against 3,894,793 tons shipped during the same period of 1927.

The total wood pulp production was reported to be 186,260 tons in July as compared with 209,797 tons in June and 227,185 tons in May. Total production for the first seven months was 1,476,529 tons as compared with 1,513,988 tons during the same period of 1927.

COMPARATIVE REPORT OF PAPER OPERATIONS IN IDENTICAL MILLS FOR THE MONTH OF JULY, 1928

| Grade | | Production tons | Shipments tons | Stocks on hand end of month tons |
|---|---|---|---|---|
| News print | | 110,313 | 109,611 | 40,386 |
| Book | | 87,001 | 87,595 | 58,306 |
| Paperboard | | 195,646 | 198,802 | 50,759 |
| Wrapping | | 51,189 | 53,618 | 53,618 |
| Bag | | 13,857 | 13,200 | 9,281 |
| Writing | | 27,187 | 27,660 | 42,525 |
| Tissue | | 11,574 | 11,784 | 13,482 |
| Hanging | | 3,869 | 3,037 | 4,338 |
| Felts and building | | 10,965 | 10,603 | 2,032 |
| Other grades | | 21,780 | 23,803 | 16,741 |
| Total—All grades | July— | 533,381 | 539,713 | 291,468 |
| | June— | 581,792 | 573,909 | 297,575 |
| Seven months 1928 | | 4,040,668 | 3,991,236 | 291,468 |
| Seven months 1927 | | 3,925,229 | 3,894,793 | 258,975 |

COMPARATIVE REPORT OF WOOD PULP OPERATIONS IN IDENTICAL MILLS FOR THE MONTH OF JULY, 1928

| Grade | | Production tons | Used tons | Shipped tons | Stocks on hand end of month tons |
|---|---|---|---|---|---|
| Ground wood | | 72,667 | 78,904 | 2,971 | 110,596 |
| Sulphite news grade | | 35,005 | 34,501 | 2,067 | 9,646 |
| Sulphite bleached | | 23,135 | 20,172 | 2,967 | 2,787 |
| Sulphite easy bleaching | | 2,942 | 2,486 | 363 | 471 |
| Sulphite Mitscherlich | | 5,842 | 4,945 | 785 | 1,544 |
| Sulphate pulp | | 23,383 | 18,491 | 5,415 | 5,877 |
| Soda pulp | | 23,211 | 14,423 | 8,926 | 4,282 |
| Pulp—Other grades | | 75 | ..... | 83 | 115 |
| Total—All grades | July— | 186,260 | 173,922 | 23,577 | 135,318 |
| | June— | 209,797 | 184,316 | 24,733 | 146,557 |
| Seven months 1928 | | 1,476,529 | 1,312,217 | 158,481 | 135,318 |
| Seven months 1927 | | 1,513,988 | 1,361,776 | 139,631 | 177,306 |

## Indianapolis Paper Demand Good

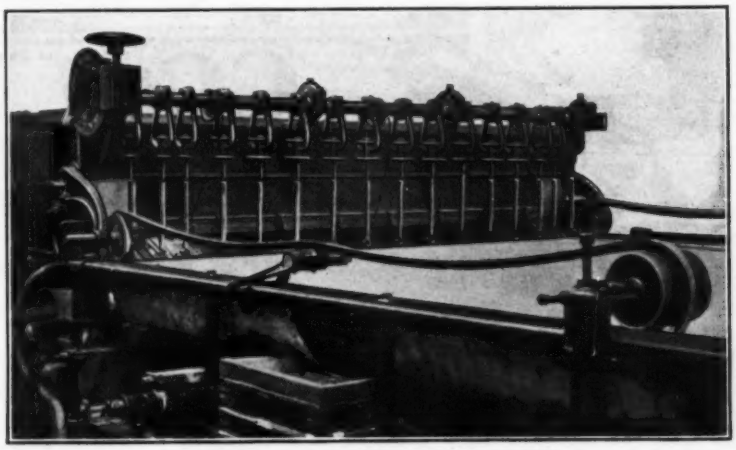
INDIANAPOLIS, Ind., September 24, 1928.—A considerable improvement is reported in the paper business here, particularly among the box manufacturers, where active preparations are being made for the holiday trade. It seems, from present indications, that business this year in this line will be better than it was last during the similar season. The same thing applies also to glassine and grease proof paper products. A considerable demand is coming from the confectionery trade just now with prospects of much more business during October.

Department stores here are buying more news paper space now than they did this time last month and demand for news print is greater. Also the stores are proceeding with their fall direct by mail campaigns and the printers and allied trades are feeling the impetus of new business.

The recent strength in prices on kraft wrapping papers does not seem to have curtailed the demand. Both rolls and sheets are in a strong price position, as compared with a month ago, and demand is good. The local jobbers, however, do not seem much concerned, for most of them made some heavy purchases during the summer when prices were much lower and until the demand diminishes these stocks, they will not feel the effect of stronger price levels.

Demand for building and roofing papers, while not at the level desired, is improving and prospects are bright for a good fall business.

# Better Paper *but* Lower Production Costs



# profit-earning

**That's the story of the Voith Inlet.**

**—and it's based upon the operation of 240 Voith Inlets—on many grades and kinds of paper.**

**The experience of 115 mills shows that the Voith Inlet is effecting savings on items that lower production costs, while at the same time improving the quality of the paper. By accurately controlling the flow of stock onto the wire, paper of uniform caliper is assured—more wire surface is used for formation purposes—fewer lumps and foam spots.**

**The initial cost of the Voith Inlet is soon earned by its performance—then the installation is reflected in the profit column of the ledger for a long time.**

**Investigate the Voith Inlet. It is equipment every mill operating Fourdrinier, Harper or Yankee machines can install to lower production costs.**

***Write for our special booklet on the Voith Inlet.***
***We'll gladly send it and complete information.***

## VALLEY IRON WORKS CO.

*Machinery for Paper and Pulp Mills*

**APPLETON WISCONSIN**

*New York Office:* **350 Madison Avenue**

*Western Manufacturing & Sales Division:*
*Smith & Valley Iron Works Co., Portland, Oregon*

# CONSTRUCTION NEWS

*A Summary of Vital Facts Regarding Construction, Finances and Operation of Paper Mills*

### Construction News

**Cincinnati, Ohio**—The Container Corporation of America, 5500 Eastern avenue, manufacturer of corrugated paper containers, fiber boxes, etc., has plans under way for the construction of a new addition to local mill, to be two-story, 175 x 300 feet, reported to cost in excess of $150,000, including equipment. The Devore Company, Toledo, Ohio, are architects and engineers. Headquarters of the company are at 111 West Washington street, Chicago, Ill. The last noted office will soon ask bids on general contract for its proposed new mill at 900 Ogden avenue, Chicago, to be two-story, brick and steel, reported to cost close to $500,000, with equipment. Plans for the latter project are being drawn by Francisco & Jacobus, 360 North Michigan avenue, Chicago, architects and engineers. E. R. Hankins is vice-president.

**Downington, Pa.**—The Bicking Paper Manufacturing Company, 222 East Lancaster avenue, S. Austin Bicking, head, has completed plans and will soon proceed with construction of new plant unit on Lancaster avenue, to be one-story, reported to cost about $25,000, with equipment. It is understood that structure will be used largely for storage and distributing service. Contract for erection has been let to W. I. Pollock, Manor street, Downingtown.

**St. Helens, Ore.**—The Fir-Tex Insulating Board Company, recently organized by Herbert Fleishhacker, president of the Anglo, London & Paris National Bank, San Francisco, Cal., and associates has plans maturing for the construction of a new plant on site selected at St. Helens, where tract of about 150 acres of land with extensive water frontage on Columbia River, has been secured. Initial plant will consist of a group of reinforced-concrete units with total area 100 x 400 feet, arranged to provide for extensions in the future. The mill will have a rated output of about 250,000 square feet of insulating board per day, with equipment installation to include six 18-foot rotary digesters, ten hammer shredders and auxiliary apparatus, with one 13-foot Fourdrinier paper-making machine, and accessories. Project will include a steam power plant with three 500 hp. boilers, feed-water pumps and auxiliary power apparatus. The company has perfected arrangements for raw material supply from a number of saw mills in this vicinity. The complete project will represent an investment of close to $2,000,000. John S. Baker, president of the Fidelity Trust Company, Tacoma, Wash., is interested in the new company, as well as Kenneth D. Dawson, Portland, Ore., and Frank T. Griffith, president of the Portland Electric Power Company, Portland. A. E. Millington will be vice-president and general manager, and Thomas G. Taylor, secretary and treasurer.

**Seattle, Wash.**—The Rhinelander Paper Company, Rhinelander, Wis., is reported seeking a site in the vicinity of Seattle, for a proposed new mill on the Pacific Coast. It is understood that negotiations are in progress for a tract of land. Project will consist of a number of buildings with ultimate cost stated at close to $2,000,000. William Eibel is treasurer and general manager.

**Kalamazoo, Mich.**—The Kalamazoo Stationery Company, Harrison street, has awarded a general building contract to the O. F. Miller Company, Pratt Building, Kalamazoo, for a proposed new power plant at its factory, and will proceed with work immediately. Structure will be located on Taylor street, and will be one-story and basement, 50 x 50 feet, reported to cost close to $50,000, with equipment. It is understood that list of machinery to be installed has been arranged.

**Brooklyn, N. Y.**—Harkavay & Gold Inc. has been organized by Israel Harkavay, 26 Court street, Brooklyn, and associates with capital of $10,000, to manufacture and deal in paper products of various kinds. New company is said to be planning for early operations in a local factory.

**Cincinnati, Ohio**—The Formica Insulation Company, 4614 Spring Grove avenue, manufacturer of fiber insulation specialties, has work under way on a new three-story addition to its mill, to provide for considerable increase in present output. It will aggregate about 20,000 square feet of floor space and is estimated to cost close to $75,000, with equipment. The Ferro Concrete Construction Company, Third and Elm streets, city, has the general building contract.

**West Point, Va.**—The Albemarle-Chesapeake Company, Inc., recently formed by a merger of the Albemarle Paper Manufacturing Company, Richmond, Va., and the Chesapeake Corporation, West Point, has plans maturing for its proposed new mill at the last noted place. It is understood that work will begin at an early date. The plant is expected to cost close to $1,500,000, and will be given over to the manufacture of kraft paper. A list of equipment to be installed is being arranged, and an initial order for a paper-making machine has been given to the Pusey & Jones Company, Wilmington, Del. Awards for other apparatus, including power equipment, etc., will be made at an early date. The new plant is expected to give employment to about 300 operatives. H. W. Ellerson is president.

**Antioch, Cal.**—The Fibreboard Products, Inc., Antioch, will proceed with the construction of new plant on local site for which general contract recently was let to Barrett & Hilp, 918 Harrison street, San Francisco. It will be one-story and basement, reported to cost more than $75,000, with equipment. Leland Rosener, 233 Sansome street, San Francisco, is engineer. J. L. Connelly is plant superintendent.

**Brooklyn, N. Y.**—The Continental Paper & Bag Mills, L Pershing Square, New York, has leased space in the Bush Terminal, South Brooklyn, and will use for expansion in storage and distributing facilities.

**Toronto, Ont.**—The Canadian Paperboard Company, Ltd., has work under way on a new mill on Commissioners street, one-story, 162 x 255 feet, and proposes to have unit ready for occupancy at an early date. Another one-story building 70 x 320 feet, will be built on adjoining site, to be used primarily for storage and distributing service. The complete project is reported to cost about $250,000, with machinery.

**Tuscaloosa, Ala.**—The Gulf States Paper Corporation is pushing construction on a new steam power plant for its proposed local kraft paper mill, and has made awards for various equipment through the United Engineers & Constructors, Inc., 112 North Broad street, Philadelphia, Pa., engineer for the station. The plant will have an initial rating of 7500 kw., with installation to

# OVER THE HURDLES

A board machine has as many hazards as a steeplechase track—suction boxes, couch rolls, stock density, whippers, speed of flow. . . . . .

Here, at Albany, we have found the way to make felts which surmount these handicaps and deliver a good, well finished board at profitable speed.

Albany Felt designers have met and solved this problem with "Tailor-Made" Felts . . . . . individually designed to meet the actual conditions on the machine for which they are intended, for no single "standard" bottom or top can possibly meet the different conditions that prevail in various mills.

The most convincing evidence of the superiority of Albany "Tailor-Made" Bottoms and Tops is to dress your machines with a set of these individually designed felts . . . . and watch results.

# ALBANY FELTS

TAILOR-MADE *by* ALBANY FELT COMPANY, ALBANY, N.Y.

"Tailor-Made" Felts Carry the Board Over the Hazards Like a Thoroughbred

include three 1,000 hp. boilers, equipped to use pulverized fuel. Condensing water will be pumped from a well on the bank of the Black Warrior River where plant site is located. A contract for prime movers and other electrical apparatus has been awarded to the Westinghouse Electric & Manufacturing Company, East Pittsburgh, Pa.; boilers will be of water-tube type, furnished by the Heine Boiler Company, St. Louis, Mo. The complete power plant will cost in excess of $850,000.

### New Companies, Etc.

**Chicago, Ill.**—Merchants Paper Corporation, 30 East Kinzie street, has been incorporated with capital of $20,000, to manufacture and deal in paper and paper products. The incorporators are Clarence M. Baustert and Andrew M. and H. A. Johnson. The company is represented by Rathje & Connor, 11 South LaSalle street, Chicago.

**New York, N. Y.**—The Advelope Corporation has been incorporated with capital of $100,000, to manufacture and deal in mailing envelopes, and kindred paper products. The incorporators are J. B. Felshin and E. Levinson. The company is represented by Morris Kirschstein, 154 Nassau street, New York, attorney.

**New York, N. Y.**—The United States Waste Paper and Bag Company has been incorporated with capital of $10,000, to deal in paper waste, etc. L. J. Margolin, 1457 Broadway, is principal incorporator and representative.

**Chicago, Ill.**—The Artransfer Corporation, 552 West Lake street, has been incorporated with capital of $10,000, to manufacture and deal in delcomanias, and other special paper goods. The incorporators are H. A. O Connor, and Charles E. Selleck, 139 North Clark street, Chicago. Last noted is representative.

## News of the Kalamazoo District

[FROM OUR REGULAR CORRESPONDENT]

KALAMAZOO, Mich., September 24, 1928.—Harry C. Bradford, secretary of the Rex Paper Company, has been elected chairman of the Kalamazoo County Republican Committee.

George P. Wigginton, who recently resigned as vice president of Remington Rand, Inc., was a Kalamazoo visitor the past week. He has returned to his farm at Leonardtown, Md.

L. W. Leathers, vice president of the Consolidated Paper Company, Monroe has been elected president of the Monroe State Savings bank to succeed the late Thomas I. Ilgenfritz.

Ivar Lundbeck, of the Lee Paper Company, has been re-elected chairman of the Paper Technologists Club. Other officers are: Vice president, Elbert Milham; secretary-treasurer, Arthur Dreshfield. The October meeting will be devoted to preparation of the program for the year's work.

The O. F. Miller Company has completed the erection of two new buildings in Kalamazoo. For the Standard division of the Sutherland Paper Company, they erected an addition of brick and steel, 48 by 76½ feet in dimensions. The second structure was a power plant for the Kalamazoo Stationery Company. This building is 52 by 52, one story high.

## Tablet Business Reported Good

[FROM OUR REGULAR CORRESPONDENT]

DAYTON, Ohio, September 24, 1928.—Jake Loeb, widely-known in the paper and tablet trade, especially in the Southern States, but who makes his headquarters in this city, has been in Dayton for the past fortnight. He reports trade fairly good with prospects for the future brighter than they have been for some time.

Since the various tablet manufacturing concerns combined their interests and established headquarters in Dayton, business has been on the upgrade and prices have been satisfactory. Mr. Loeb for a number of years prior to the merger, was identified with the Reynolds & Reynolds Company of this city. This concern and those at West Carrollton were the principal Ohio companies forming the new company of which W. W. Sunderland, formerly of the Miami Paper Company, is head. Other national officers also are located here.

## DuPonts Buy Alum Plant

[FROM OUR REGULAR CORRESPONDENT]

ALBANY, N. Y., September 22, 1928.—A statement of interest to the paper industry was made here this week when it was announced that the alum division of the North Hudson Chemical Company, of this city, has been sold to the E. I. Dupont de Nemours Company, Inc., of Wilmington, Del., producers of chemicals, explosives, etc. The alum division of the North Hudson Chemical Company is one of the largest producers of alum in up-state New York and its customers include many of the large paper mills.

Announcement of the deal was made by John MacGruer, president and R. W. Lesser, treasurer of the North Hudson Chemical Company, and E. A. Oren, sales manager of the acid and heavy chemical division of the Dupont Company. None of the parties involved in the negotiations would make public the financial details of the deal.

President MacGruer stressed the fact that it is only the alum division of the local firm that is affected by the sale and that its other divisions will continue to function as part of the North Hudson Company. He said his firm will concentrate its efforts in their other departments and at the same time act in an advisory capacity to the Dupont people.

The Dupont Company now owns an alum plant in Philadelphia. Its acquisition of the Albany plant is said to have been influenced by the large number of paper mills located in the territory of which Albany is the center. With the local plant and the excellent transportation facilities available the Dupont Company will be in a position to give quick service to the mills of the Upper Hudson Valley and Northern New York.

The business will continue to be operated in the present plant in Tivoli street and Mr. Orem, of the Dupont Company said no expansion is contemplated at the present time. About fifty workers are employed in the alum plant. The sales organization for this division will make its headquarters in Albany and twelve salesmen will travel out of the city visiting the various paper mill centers.

## Boston Paper Market Steady

BOSTON, Mass., September 24, 1928.—All lines of paper are moving well in this market at firm prices. The box board business is increasing because of the growing broad demand for boxes. A dealer who has been a member of the industry for many years notes that there are many new uses for boxes. An order for 200,000 containers for medicine bottles was recently placed. It is not intended for the containers to be removed while the bottles are in use.

Paper stock continues sluggish. The price of manila rope has been marked down to 3.25 as the minimum figure, with the value ranging from 3.25 to 3.50, compared with a flat quotation of 3.50 a week ago. The demand for dark cottons has fallen off somewhat. The price is now 1.62½ to 1.65, compared with a former range of 1.65 to 1.70. The market in Europe, however, is firm.

## G. A. Cooper With Simplified Practice Division

George A. Cooper of the Monongahela West Penn Public Service Company, Fairmont, W. Va., has been appointed as an Assistant Chief Business Specialist in the Division of Simplified Practice of the Bureau of Standards, U. S. Department of Commerce, according to Ray M. Hudson, Assistant Director in Charge of Commercial Standards Group of the Bureau.

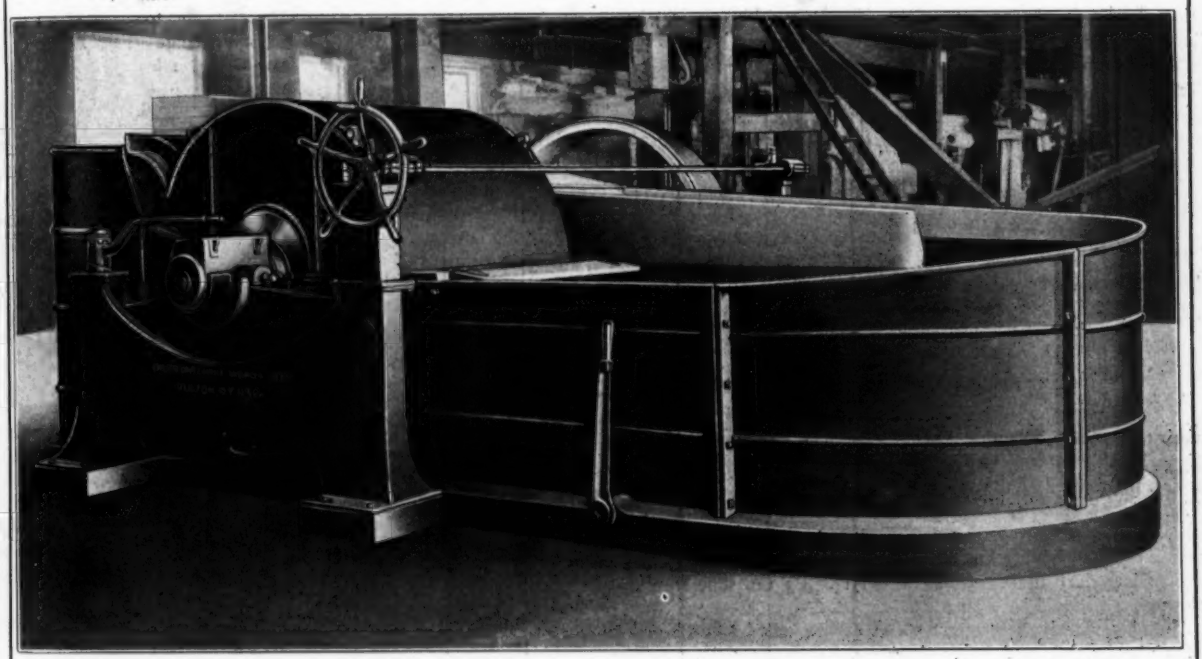
Prior to coming with the Division of Simplified Practice Mr. Cooper was Superintendent of Materials of the Monongahela West Penn Public Service Company. He has had considerable experience in the actual application of simplified practice within a company, inasmuch as his concern reduced their financial investment in inventory by 33 per cent and eliminated 16 per cent of the items carried in stock through simplification.

"Your Paper is Made in your Beaters"

# NEW TYPE

HIGH DENSITY

# BETTER CIRCULATING



**THE PROBLEM** is "how to beat *more* stock into *better* quality with *less* cost for labor and power."

**THE ANSWER** is "the Dilts New Type, High Density, Better Circulating Beater, built with high tub and with the roll located toward the rear end."

*We can rebuild your beaters to our NEW TYPE design.*

**Dilts**

**MACHINE WORKS, Inc. FULTON, N.Y.**

EXPORT OFFICE - 15 PARK ROW - NEW YORK CITY

"Your Paper is Made in your Beaters"

# Trade Mark Department

CONDUCTED BY NATIONAL TRADE-MARK CO., WASHINGTON, D. C.

The following are trade mark applications pertinent to the paper field pending in the United States Patent Office, which have been passed for publication and are in line for early registration unless opposition is filed promptly. For further information address National Trade Mark Company, Barrister Bldg., Washington, D. C., trade-mark specialists. As an additional service feature to its readers, PAPER TRADE JOURNAL gladly offers to them an advance search free of charge on any mark they may contemplate adopting or registering.

SQUARE BRAND—No. 266,429. Japan Paper Company, New York City. For decorative tissue paper.

LINLIKE—No. 266,713. Capital Paper Company, Indianapolis, Ind. For toilet paper.

HOLDTITE—No. 267,238. Capital Paper Company, Indianapolis, Ind. For wrapping paper in rolls, parchment paper in sheets, fancy wrapping paper.

A. P. W. FINEST SATIN TISSUE—No. 268,525. Albany Perforated Wrapping Paper Company, Albany, N. Y. For toilet paper.

PADOGRAPH—No. 269,155. Hunley E. Seaton, Los Angeles, Cal. For memorandum pads, combined loose-leaf desk pad and calendar holder, and fillers for the same.

ASSOCIATED PAPER COMPANY, ASSOCIATE YOUR BUSINESS WITH THE ASSOCIATED—No. 266,639. Associated Paper Company, Chicago For corrugated cake circles, corrugated paper, crepe paper, doiles, correspondence envelopes, check books, paper napkins, paper towels, toilet paper, wrapping paper, etc.

THE HOSTESS—No. 270,463. Charles S. Clark Company, New York City. For bridge-prize wrappings.

PHANTOM—No. 270,932. Hazen Paper Company, Holyoke, Mass. For coated book papers, coated box papers, ledger papers, bond papers, cover papers, etc.

C. F. M. K.—No. 263,052. Stanislau Flis, and Mateusz Kasprzak Gowanda, New York. For envelopes.

## National Safety Council to Meet

W. J. Peacock, of the Northern Paper Mills, Green Bay, Wis., chairman of the Pulp and Paper Section of the National Safety Council which meets in New York, October 1 to 5, writes as following regarding the convention: The fireworks begin with Five Minute talks by our regional directors. Maine, Massachusetts, Michigan, New York, Ohio, Pennsylvania, Wisconsin Valley, and Fox River Valley, each will be heard from and the directors are to introduce their regional delegates. By the time they are through we should be acquainted.

Tuesday morning's program starts with a talk by "Bill" Ashe, of Thilmany Pulp and Paper Company, Kaukauna, Wis., on "The Relative Importance of the Plant Safety Department." Bill knows how to provoke thinking and he has positive ideas as to the importance of the safety man's job.

C. H. O'Connell, of the International Paper Company, of wide experience, will start our thinking as to "Outstanding Hazards in the Industry." Mr. O'Connell heads the safety work of a great corporation and his experience is at our command.

Dr. J. G. Cunningham, Director of Industrial Hygiene, Department of Health, Toronto, Canada, will give us early impressions of the breadth of our safety field.

The three topics named look like the worth of the trip to New York, whatever be the distance.

Wednesday morning brings important topics of last-minute interest. W. H. Blackwell, General Lighting Representative, Public Service Corporation, Newark, N. J., will give us an address that is authoritative on lighting in relation to safe conditions.

Dr. P. H. Larkin, Plant Surgeon of the Larkin Company, Buffalo, is to tell us how to administer First Aid in both small and large plants. This should be a gem of an address.

For the third address Franz has something up his sleeve which will be divulged when we get the final program at New York.

The Wednesday luncheon features the Cup Award. The speaker of the occasion is to be F. L. Irvin, who will tell us what beneficial results have been secured from safety in his plant.

The award of trophies will be the high spot of the week. The president of the National Safety Council, Homer E. Niesz, will present the A. B. and C. class trophies. "Dad" Fritz, publisher of The Paper Industry, will present the Grand Trophy.

Nominating Committee: To report at the New York Congress. W. E. Gleason, Hammermill Paper Company, Erie, Pa.; N. H. Bergstrom, Bergstrom Paper Company, Neenah, Wis.; N. F. Bartlett, Hollingsworth & Vose Company, Boston, Mass.; Ernest Augustus, Mead Pulp and Paper Company, Chilicothe, Ohio.

The membership of the section now includes 205 companies, a number of them with multiple mills. Twenty-two new members have joined since the Congress at Chicago a year ago.

## Simple Paper Testing

Papierprüfung. Handbuch der Praxis über Papierprüfungsmethoden und Papierbegutachtungen. Robert Reimer. Berlin, Carl Hofmann GmbH. Second printing, 1928(?). 256 pages. Price, 12 gold marks.

This is a very elementary book on paper testing; it is devoted to simple tests, so described that (according to the publisher's announcement) "one without special knowledge of the art may carry out the tests given and obtain an *exact* knowledge of the paper in question." The papers covered are: Filter, blotting, silk, parchment, an imitation parchment, wrapping, including straw, printing, writing, drawing and finally, boards. Most of the tests are qualitative and the details are very minute. It is apparently assumed that the one making the test knows nothing about chemistry or the ordinary laboratory apparatus used for such testing. While the book may have a certain amount of value to some people, it certainly is of no interest to the members of TAPPI.

From the standpoint of book making, the work under review leaves practically everything to be desired. The 256 pages are printed without a single center or side head and also without running heads. It comes with uncut signatures and, upon cutting the pages, it is found that only the two sheets on the outside of the signature are glued to the cover, no attempt having been made to stitch or staple the signatures. The result is that, upon cutting the pages of a signature, all but the four outside pages of the signature are loose and fall out. Further, a very cheap paper cover is used, half of which was torn away when the book was received. The book is further marred by the insertion, as numbered pages, of a number of pages of advertisements. There also are 112 pages of advertisements at the end, but without any index of firms.

Certainly, this book is far from being up to the ordinary high standard set by the firm of Carl Hofmann.—CLARENCE J. WEST.

## Ohio Mills Complain In Freight Rates

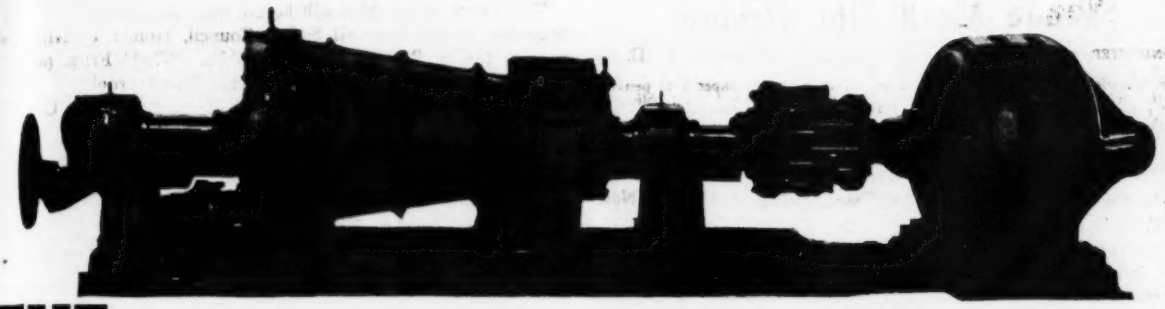
[FROM OUR REGULAR CORRESPONDENT]

DAYTON, Ohio, September 24, 1928.—A number of paper companies in Dayton, Hamilton and Middletown and other Miami Valley towns during the past week were among the Ohio concerns that filed complaint with the Interstate Commerce Commission in Washington, D. C. against numerous railroads concerning freight rates on various kinds of paper transported from this section to Iowa and neighboring states.

Among the concerns filing complaints were the Mead Pulp and Paper Company of this city; the Advance Bag and Paper Company, Middletown; the Beckett Paper Company, Hamilton; the Maxwell Paper Company, Franklin; the Crystal Tissue Company, Middletown; the Champion Coated Paper Company, Hamilton; the Miami Valley Coated Paper Company, Franklin; the Nashua Gummed and Coated Paper Company, Middletown; the Oxford Miami Paper Company, West Carrollton; and the Paul A. Sorg Paper Company, Middletown.

The crux of the complaint is that the freight rates favor competitors in Lockland, located in the southern part of the valley, at Rialto and Arlington Heights, Ohio, and in Wisconsin.

Reparation for overcharges on past shipments is demanded and a more equitable rate for the various companies.



# THE No. 2 EMERSON JORDAN

## *is equipped with*

## TIMKEN ROLLER BEARINGS

### *A New Epoch in the paper making industry*

**The No. 2 Emerson Jordan, shown above, is a masterpiece of refining equipment, having Timken Roller Bearings and Bandless Plug. This sturdy, well constructed bearing application is just another characteristic of Emerson Quality and progressive engineering.**

***Features to Consider.***

**(1) Timken Roller Bearings, both radial and thrust, are mounted on taper-bored sleeves.**

**(2) Bearings are enclosed in sealed housings that prevent the bearing troubles generally experienced when bearings are mounted directly on the shaft.**

**(3) Bearings are NOT mounted directly on the shaft.**

## THE EMERSON MANUFACTURING CO. Lawrence, Mass.

# New York Trade Jottings

O. F. Swanson, sales manager of J. Anderson & Co., and the Pulp and Trading Company, has returned to headquarters after a long tour of the West.

* * *

Edwin M. Allen, president of the Mathieson Alkali Works and of the Commonwealth Chemical Corporation, has been elected to the Chemists' Club, New York.

* * *

J. H. Hill, general manager of Brittains, Ltd., Cheddleton, England, and his son, Sydney, arrived in New York last week and are attending the Fall Meeting of TAPPI at Wausau, Wisconsin.

* * *

The St. Regis Paper Company has declared a regular quarterly dividend of 75 cents a share on the common stock of the company and $1.75 a share on the preferred, both payable October 1 to stockholders of record September 15.

* * *

Dr. Edward G. Acheson, inventor of artificial graphite and carborundum, has contributed $25,000 to the American Electrochemical Society to be used as the basis for an award every two years of a gold medal and $1,000 to any man who has made a distinguished contribution to any branch of science fostered by the society.

* * *

Arthur T. Robb, Jr., managing editor of the *Printer and Publisher*, will be the guest speaker at the next weekly luncheon and meeting of the New York Division of the Salesmen's Association of the Paper Industry, to be held in the Canadian Club next Monday, October 1. Mr. Robb will probably present the publishers point of view on the present news print situation.

* * *

The Board of Directors of the International Paper Company, New York, have declared a regular quarterly dividend of 1¾ per cent on the cumulative 7 per cent preferred stock of the company, and a regularly quarterly dividend of 1½ per cent on the cumulative 6 per cent preferred stock of the company, for the current quarter, payable October 15 to holders of record at the close of business September 20.

* * *

J. W. Diefenbach, head of the research department of J. M. Huber, Inc., printing ink manufacturers, was the guest speaker at the regularly weekly luncheon and meeting of the New York Division of the Salesmen's Association of the Paper Industry, at the Canadian Club last Monday. His address on "Printing Inks" was highly appreciated and lead to an interesting discussion. There was an excellent attendance.

* * *

Assistant Collector of the Port H. C. Stuart has issued a warning to customs brokers of a certain class to cease over-charging and other illegal dealings, or action will be taken by the customs authorities to revoke their licenses. Without reflecting on reputable firms, Mr. Stuart feels that the time has arrived for action of this kind and he advises importers not to pay misleading and excessive charges. Brokers are requested to detail the character of service on bills rendered to importers and to avoid charging for items where no expense was actually incurred.

## Back Tender Killed at West Linn

PORTLAND, Ore., September 21, 1928.—James McGeehan, aged 30, was instantly killed at the West Linn plant of the Crown Willamette Company in Oregon, on September 17. He was a back tender on one of the machines, and it is thought that he reached his arm in too far and was caught and drawn into the roll. He is survived by his widow and mother.

## Boston Paper Trade Happenings

BOSTON, Mass., September 24, 1928.—Boston representatives of the American Writing Paper Company and the Crocker-McElwain Company are attending meetings of agents held under the auspices of those companies at Holyoke, Mass., this week.

Massey & Wendell, Inc., have added a new line of embossed cover stock, made by the Port Huron Sulphite and Paper Company, Port Huron, Mich. The additional floor space of 5,000 square feet recently added, making about 10,000 square feet in all, at their offices at 110 High street, has greatly facilitated the handling of their increasing business.

The Storrs & Bement Company has become a distributor of two new Linweave lines. One is Sarouk, a specialty paper, with envelopes to match, for announcements, greeting cards, etc. The other is Milano, a book or stationery paper, with envelopes to match.

W. B. Stevenson, president and treasurer, and W. N. Stetson, vice-president and secretary of Storrs & Bement Company, attended a meeting of agents of the S. D. Warren Company, at Poland Springs, held recently.

B. C. Spaulding, secretary of Baird & Bartlett Company, and Mrs. Bartlett, have returned from a vacation, including Niagara Falls and New York State.

C. F. Sisson, assistant treasurer of the New Haven Pulp & Board Company, New Haven, Conn., and John L. S. Joralemon, sales manager of the Fandango Mill, Millburn, N. J., called on the trade last week.

Employees of the Davis Paper Company, West Hopkinton, N. H., will be given an opportunity to attend the Hopkinton Fair at Contoocook, N. H., September 25-27.

The Whiting Paper Company, Holyoke, Mass., is installing two new machines to meet increasing business.

## Finlayson Praises Spruce Falls Paper Mill

KAPUSKASING, Ont., September 18, 1928.—The Spruce Falls Power and Paper Company, Ltd., entertained 450 persons at dinner tonight in connection with the arrival in Kapuskasing of a large number of Canadian and American visitors who are interested in the development here.

The main address of the evening was made by William Finlayson, Minister of Lands and Forests in the Province of Ontario, who emphasized the contribution made by the company toward opening Northern Ontario, and toward providing employment under the best circumstances for a large number of people.

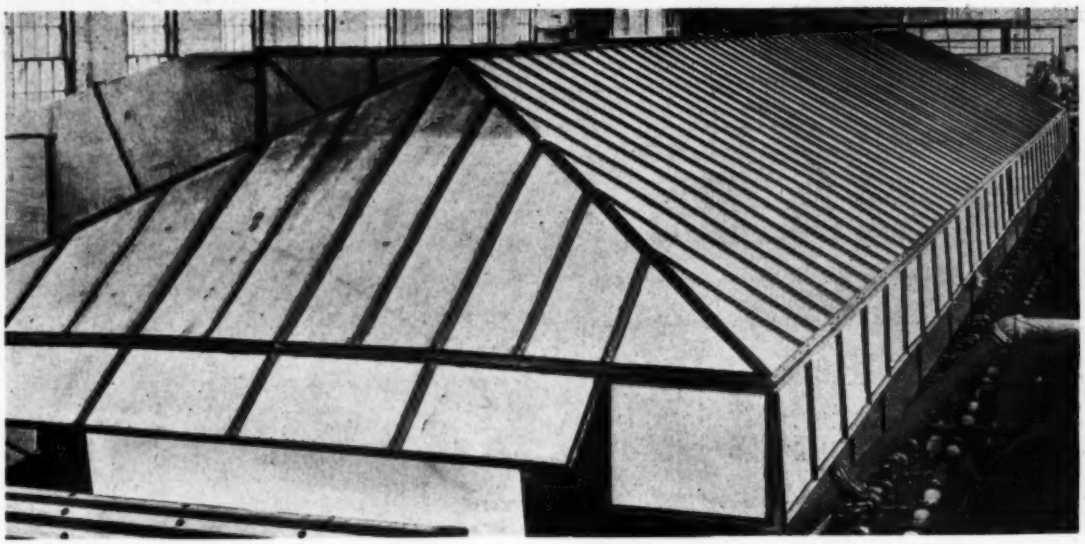
F. J. Sensenbrenner, president of the company, presided and introduced Adolph S. Ochs, president of *The New York Times* Company, which, in conjunction with the Kimberly-Clark Company, of which Mr. Sensenbrenner is also the president, jointly owns the capital stock of the Spruce Falls enterprise.

Three out of four news print machines, which will produce 550 tons daily, are now in operation. The major part of the production will supply *The New York Times's* total requirements; the balance will then be marketed. The plant itself was built by Morrow Beatty, Ltd., of Toronto, from the plans drawn by George F. Hardy of New York City.

The town of Kapuskasing has been built by the company and now numbers some 5,000 inhabitants. It is located on the main line of the Canadian National Railroad and is rapidly developing into a model city of the north country. The hotel, hospital, community house and school are unsurpassed north of Toronto.

## W. L. Lucey Arrives at Hoquiam

PORTLAND, Ore., September 21, 1928.—W. L. Lucey, of Erie, Pa., who will be in charge of operations of the Hammermill paper plant which the company is just starting at the site of the new Grays Harbor plant at Hoquiam, Wash., has arrived in that city and will make his permanent residence there.



*No other Hood combines ALL these advantages of*

# TRANSITE HOODS

1. Permanence without maintenance
2. Absolute fireproofness
3. Accessibility to machine parts
4. Lasting high efficiency

HOODS that do not meet every one of these requirements are expensive no matter how small their initial cost.

Too many hoods are today accepted as satisfactory when, in reality, they are but fifty per centers—only half way between the practically obsolete unhooded machine and one which is *scientifically* hooded. Our Transite Asbestos Lumber Hoods are scientifically designed.

They give maximum assistance to the ventilating system; they provide fireproof, rotproof and permanent receptacles for gathering the moist air; their smooth undersurface and vapor-tight construction permit the uninterrupted flow of this moist air to the economizer or out-of-doors.

Unique among Hood designs is our Panel Type construction developed by us to eliminate costly machine shutdowns during hood erection and machine repairs.

The Panel Type Hood illustrated above was delivered to the mill in knocked-down form. Assembly of the Hood was made in less than fifteen hours on a regular week-end shutdown.

Speedy repairs or adjustments to dryers, felt rolls and gears are possible by removing one or more Hood panels, which are readily put back in place.

Are your hoods fifty per centers? One of our engineers will gladly help you in arriving at an answer to this question. Use the coupon for complete information.

MASTER of ASBESTOS
**Johns-Manville**
*TRANSITE ASBESTOS LUMBER*
PAPER MACHINE HOODS

JOHNS-MANVILLE CORPORATION
*Paper and Lumber Industry Section*
New York, Chicago, Cleveland, San Francisco
Branches in all large cities
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Please send me copy of your booklet, "Controlling Condensation."

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Company_____

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PMH-99-S

# PAPER AND PAPER STOCK IMPORTS AND EXPORTS OF THE UNITED STATES

## For the Month Ending June 30, and for the Six Months Ending June 30, 1928, as Compared With Corresponding Months of Previous Year

### IMPORTS—PAPER

| | June | | | | Six Months Ending June 30 | | | |
|---|---|---|---|---|---|---|---|---|
| | 1927 | | 1928 | | 1927 | | 1928 | |
| | Quantity | Value | Quantity | Value | Quantity | Value | Quantity | Value |
| Paper and manufactures (total) | ..... | $13,095,917 | ..... | $12,035,580 | ..... | $71,603,015 | ..... | $75,944,633 |
| Printing paper— | | | | | | | | |
| Standard news print....lbs...free | 322,945,086 | 10,669,509 | 327,614,337 | 10,693,113 | 1,892,991,203 | 62,630,016 | 2,068,350,409 | 67,570,558 |
| Imported from— | | | | | | | | |
| Finland ....lbs. | 5,578,828 | 162,193 | 5,378,345 | 133,942 | 32,433,875 | 924,383 | 36,213,470 | 956,025 |
| Germany ....lbs. | 1,123,090 | 47,523 | 1,168,944 | 32,501 | 7,572,086 | 244,924 | 8,418,357 | 228,635 |
| Norway ....lbs. | 2,551,670 | 72,331 | 846,946 | 22,475 | 17,184,293 | 467,389 | 8,643,563 | 224,620 |
| Sweden ....lbs. | 8,768,800 | 254,950 | 5,680,499 | 153,604 | 70,414,751 | 2,039,540 | 49,021,999 | 1,322,559 |
| Canada ....lbs. | 295,667,036 | 9,833,298 | 298,032,322 | 9,848,175 | 1,721,792,458 | 57,503,086 | 1,906,712,513 | 62,971,179 |
| Newfoundland and Labrador....lbs. | 8,986,141 | 291,210 | 16,507,281 | 502,416 | 42,927,128 | 1,430,564 | 58,694,585 | 1,848,801 |
| Other countries ....lbs. | 269,521 | 8,004 | ..... | ..... | 666,612 | 20,130 | 645,932 | 18,739 |
| All other, n. e. s....lbs...dut. | 660,488 | 37,377 | 591,605 | 31,352 | 5,175,794 | 259,244 | 3,967,682 | 187,810 |
| Grease-proof and waterproof paper...lbs...dut. | 180,941 | 21,661 | 115,031 | 20,455 | 953,502 | 156,441 | 546,441 | 110,643 |
| Kraft wrapping paper ....lbs...dut. | 1,343,471 | 57,187 | 544,715 | 23,799 | 4,717,503 | 207,267 | 3,167,989 | 135,250 |
| All other wrapping paper ....lbs...dut. | 146,680 | 7,815 | 1,367,373 | 34,730 | 2,173,792 | 112,607 | 9,060,253 | 191,229 |
| Writing, letter, drawing, etc., papers.lbs...dut. | 308,075 | 70,645 | 246,657 | 64,998 | 1,443,139 | 342,806 | 1,427,317 | 356,119 |
| Surface coated paper ....lbs...dut. | 248,199 | 96,240 | 151,261 | 80,644 | 1,100,741 | 436,556 | 1,103,588 | 525,898 |
| Tissue, copying, etc., paper....lbs...dut. | 222,545 | 139,209 | 213,931 | 132,638 | 1,535,533 | 879,247 | 1,527,807 | 960,590 |
| Paper boards, n. e. s.— | | | | | | | | |
| Pulp boards in rolls ....lbs...dut. | 4,387,553 | 102,179 | 5,166,057 | 106,979 | 31,411,341 | 763,958 | 29,914,230 | 660,602 |
| Paper boards, pulp board, and card-board ....lbs...dut. | ..... | ..... | 1,233,224 | 29,365 | ..... | ..... | 10,790,570 | 241,297 |
| Leather board, test, and wall board.lbs...dut. | ..... | 85,342 | 79,592 | 2,227 | ..... | 485,589 | 546,405 | 14,754 |
| Cigarette paper, cigarette books, and covers ....lbs...dut. | 4,136,937 | 1,333,890 | 982,224 | 255,599 | 8,188,363 | 2,486,925 | 6,011,690 | 1,635,276 |
| Hanging paper (wall paper)....lbs...dut. | 141,805 | 46,489 | 107,855 | 52,598 | 1,511,495 | 364,612 | 1,281,106 | 377,226 |
| Duplex decalcomania, not printed....lbs...free | 57,870 | 14,084 | 85,509 | 19,997 | 375,810 | 82,963 | 341,638 | 79,923 |
| Paper boxes ....lbs...dut. | 178,822 | 114,613 | 236,321 | 154,200 | 1,168,672 | 659,613 | 1,341,595 | 868,265 |
| Pulp or papier-mâché and manufactures, n. e. s....lbs...dut. | ..... | 25,075 | ..... | 22,936 | ..... | 181,503 | ..... | 232,056 |
| All other paper and manufactures....dut. | ..... | 274,602 | ..... | 309,950 | ..... | 1,553,668 | ..... | 1,797,137 |

### WOOD PULP

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| Mechanically ground wood pulp....tons..free | 18,103 | 559,448 | 18,329 | 430,728 | 98,925 | 2,880,571 | 111,408 | 2,729,91. |
| Sulphite wood pulp ....tons | 71,370 | 4,610,638 | 79,036 | 4,668,227 | 427,193 | 27,958,072 | 439,655 | 25,787,294 |
| Unbleached ....tons..free | 46,256 | 2,637,442 | 53,071 | 2,682,568 | 270,838 | 15,620,161 | 294,129 | 14,778,244 |
| Bleached ....tons..free | 25,114 | 1,973,196 | 25,965 | 1,985,659 | 156,355 | 12,337,911 | 145,526 | 11,009,050 |
| Imported from— | | | | | | | | |
| Finland ....tons | 4,402 | 218,362 | 9,659 | 434,449 | 42,127 | 2,253,635 | 49,441 | 2,057,431 |
| Germany ....tons | 4,179 | 297,026 | 6,151 | 423,049 | 30,386 | 2,179,075 | 28,640 | 1,908,760 |
| Norway ....tons | 5,840 | 433,188 | 4,919 | 321,434 | 34,259 | 2,613,855 | 33,665 | 2,235,231 |
| Sweden ....tons | 23,533 | 1,452,258 | 28,122 | 1,578,818 | 132,978 | 8,268,288 | 129,439 | 7,067,784 |
| Canada ....tons | 31,102 | 2,086,486 | 28,297 | 1,805,210 | 168,557 | 11,449,652 | 179,248 | 11,452,141 |
| Other countries ....tons | 2,314 | 123,318 | 1,888 | 105,267 | 18,886 | 1,193,567 | 19,222 | 1,065,947 |
| Sulphate wood pulp, unbleached (Kraft pulp) ....tons..free | 25,969 | 1,608,310 | 29,071 | 1,589,345 | 145,999 | 9,216,359 | 148,235 | 8,303,355 |
| Imported from— | | | | | | | | |
| Finland .... | 1,074 | 52,029 | 2,792 | 106,271 | 5,019 | 274,235 | 15,731 | 652,333 |
| Norway .... | 648 | 35,360 | 1,547 | 82,745 | 4,549 | 273,245 | 6,999 | 361,879 |
| Sweden .... | 13,386 | 812,921 | 14,291 | 771,869 | 70,232 | 4,328,406 | 56,634 | 2,970,305 |
| Canada .... | 10,715 | 699,430 | 10,231 | 619,274 | 65,447 | 4,291,357 | 67,138 | 4,238,860 |
| Other countries .... | 146 | 8,570 | 205 | 9,186 | 752 | 49,116 | 1,733 | 79,978 |
| Sulphate wood pulp, bleached....tons..free | 607 | 41,853 | 1,245 | 90,184 | 7,815 | 521,148 | 5,634 | 348,232 |
| Other pulp ....tons..free | 253 | 28,703 | 665 | 41,111 | 963 | 86,113 | 2,531 | 184,419 |

### CRUDE PAPER STOCK

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| Rags for paper stock....lbs...free | 31,697,548 | 705,856 | 38,612,964 | 699,963 | 185,662,317 | 3,984,336 | 210,197,802 | 3,907,175 |
| Waste bagging, waste paper, etc....lbs...free | 11,225,311 | 145,642 | 13,673,170 | 177,030 | 43,806,601 | 597,822 | 74,632,452 | 1,073,920 |
| Old rope and all other paper stock...lbs...free | 4,831,328 | 185,330 | 8,408,922 | 177,386 | 28,017,469 | 962,997 | 31,331,946 | 886,389 |

### CHEMICALS AND OTHER PAPER MAKERS' MATERIALS

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| Colors, dyes, stains, color acids, and color bases, n. e. s....lbs...dut. | 215,070 | 220,329 | 454,454 | 461,488 | 3,187,447 | 3,549,943 | 3,072,154 | 3,321,884 |
| Imported from— | | | | | | | | |
| Belgium ....lbs. | 13,943 | 18,995 | 12,441 | 13,613 | 109,465 | 159,719 | 71,587 | 77,334 |
| France ....lbs. | 6,306 | 6,783 | 11,145 | 9,970 | 101,066 | 116,442 | 43,392 | 53,974 |
| Germany ....lbs. | 120,437 | 102,789 | 290,202 | 296,521 | 2,029,471 | 2,130,376 | 1,998,480 | 2,030,481 |
| Italy ....lbs. | 5,629 | 5,742 | 7,040 | 8,100 | 58,857 | 68,789 | 44,701 | 41,364 |
| Switzerland ....lbs. | 65,140 | 80,864 | 118,346 | 120,639 | 748,829 | 933,226 | 761,209 | 940,885 |
| United Kingdom ....lbs. | 474 | 557 | 9,901 | 8,082 | 94,791 | 90,638 | 58,036 | 54,510 |
| Other countries ....lbs. | 3,141 | 4,599 | 5,379 | 4,563 | 44,968 | 50,753 | 94,749 | 123,336 |
| Casein or lactarene....lbs...dut. | 2,711,226 | 369,484 | 2,659,620 | 328,885 | 15,769,985 | 1,917,723 | 15,780,765 | 2,087,584 |
| Kaolin, china, and paper clay....tons..dut. | 24,378 | 234,825 | 16,888 | 191,717 | 149,836 | 1,471,061 | 134,487 | 1,415,756 |

(*Continued on page 42*)

# As TOUGH as its name indicates

GATOR HIDE KRAFT WRAPPING PAPER

Wrap your faith in Gator-Hide Kraft, it will not be misplaced. For Gator-Hide is tough enough and strong enough to stand up under almost any job you'd ask a Kraft paper to do.

There's a growing, insistent demand for it among retailers and converters everywhere.

*"Wrap it in Gator-Hide"*

**DISTRIBUTORS OF GATOR-HIDE KRAFT**

Anniston, Ala.
Ordway Paper Company
Asbury Park, N. J.
C. G. Winans Company
Asheville, N. C.
Southern Paper Products Co.
Atlanta, Ga.
American Mills Company
Baltimore, Md.
Dobler & Mudge
Birmingham, Ala.
City Paper Company
Boston, Mass.
Fort Hill Paper Company
Whitney Brothers, Inc.
Brooklyn, N. Y.
A. E. Mac Adam & Co., Inc.
Buffalo, N. Y.
Mugler & Umlauf
Charlotte, N. C.
Charlotte Paper Company
Cincinnati, Ohio
Merchants Paper Company
Columbia, S. C.
American Mills Company
Dallas, Texas
Texas Paper Company
Dayton, Ohio
Buyer's Paper Company
Greensboro, N. C.
Old North State Paper Co.
Hagerstown, Md.
The Antietam Paper Company
Indianapolis, Ind.
Ostermeyer Paper Co.
Jersey City, N. J.
S. Sadler, Inc
Lancaster, Pa.
United Twine & Paper Co.
Little Rock, Ark.
Parlette Brothers, Inc.
Los Angeles, Cal.
Johnson, Carvell & Murphy
Louisville, Ky.
Miller Paper Company
Marion, Ind.
Osborn Paper Company
Memphis, Tenn.
Memphis Paper Company
Newark, N. J.
C. G. Winans Company
New York, N. Y.
Trinity Bag & Paper Co.
Paterson, N. J.
Ribbon & Ticker Paper Co.
Philadelphia, Pa.
Garrett-Buchanan Company
E. Latimer, Jr.
Mather Paper Co., Inc.
Portland, Maine
C. M. Rice Paper Company
Providence, R. I.
R. L. Greene Paper Co.
Reading, Pa.
Van Reed Paper Company
Rochester, N. Y.
Cramer-Force Company, Inc.
St. Joseph, Mo.
Sheridan-Clayton Paper Co.
St. Louis, Mo.
Orchard Paper Company
San Francisco, Cal.
Johnson Locke Mercantile Co.
Seattle, Wash.
Johnson-Lieber Company
Springfield, Mass.
H. W. Carter Paper Co.
Tampa, Fla.
Peninsular Paper Company
Trenton, N. J.
C. G. Winans Company
Tulsa, Okla.
Tulsa Paper Company
Winston-Salem, N. C.
Gray & Creech, Inc.

*Another Certified Product of*

INTERNATIONAL PAPER COMPANY

# PAPER AND PAPER STOCK IMPORTS AND EXPORTS OF THE UNITED STATES

(*Continued from page 40*)

## EXPORTS—PAPER

| | June | | | | Six Months Ending June 30 | | | |
|---|---|---|---|---|---|---|---|---|
| | 1927 | | 1928 | | 1927 | | 1928 | |
| | Quantity | Value | Quantity | Value | Quantity | Value | Quantity | Value |
| **Paper and manufactures (total)** | ..... | $2,539,412 | ..... | $2,825,946 | ..... | $13,868,909 | ..... | $15,274,048 |
| **Printing paper—** | | | | | | | | |
| News print paper ..... lbs. | 2,238,471 | 112,700 | 1,732,735 | 59,689 | 14,774,830 | 700,251 | 10,517,707 | 402,728 |
| Exported to— | | | | | | | | |
| Canada ..... lbs. | 154,840 | 11,927 | 52,891 | 1,054 | 1,761,833 | 112,912 | 177,319 | 6,842 |
| Central America ..... lbs. | 40,387 | 1,790 | 154,802 | 5,265 | 344,278 | 16,978 | 541,444 | 19,271 |
| Mexico ..... lbs. | 27,584 | 1,476 | 22,587 | 1,192 | 326,047 | 14,442 | 294,300 | 10,863 |
| Cuba ..... lbs. | 572,927 | 27,214 | 284,304 | 8,728 | 2,849,656 | 133,323 | 2,262,856 | 81,751 |
| South America ..... lbs. | 774,588 | 39,096 | 346,865 | 11,085 | 3,733,181 | 163,417 | 2,414,295 | 90,174 |
| China, Hong Kong, and Kwantung.. lbs. | 25,793 | 1,713 | ..... | ..... | 314,913 | 18,764 | 215,703 | 8,548 |
| Japan ..... lbs. | 9,437 | 446 | 2,025 | 81 | 67,984 | 4,048 | 2,025 | 81 |
| Philippine Islands ..... lbs. | 513,225 | 21,444 | 813,497 | 30,184 | 4,508,552 | 180,769 | 4,360,824 | 175,060 |
| Other countries ..... lbs. | 119,690 | 7,594 | 55,764 | 2,100 | 868,386 | 55,598 | 248,941 | 10,138 |
| Book paper, not coated ..... lbs. | 1,501,829 | 128,790 | 2,974,180 | 199,725 | 7,868,345 | 682,334 | 12,123,288 | 897,385 |
| Exported to— | | | | | | | | |
| Europe ..... lbs. | 76,861 | 9,266 | 112,494 | 10,883 | 702,811 | 62,978 | 297,281 | 29,531 |
| Canada ..... lbs. | 611,983 | 43,319 | 1,531,035 | 84,752 | 2,062,464 | 166,186 | 4,697,732 | 281,066 |
| Central America ..... lbs. | 24,068 | 2,169 | 63,337 | 4,553 | 159,013 | 15,640 | 252,606 | 20,962 |
| Mexico ..... lbs. | 31,757 | 4,534 | 53,532 | 5,711 | 238,289 | 26,886 | 258,294 | 31,313 |
| Cuba ..... lbs. | 171,068 | 15,295 | 518,299 | 36,576 | 1,001,603 | 87,574 | 2,472,649 | 184,158 |
| Argentina ..... lbs. | 59,242 | 4,062 | 31,295 | 3,998 | 455,432 | 25,858 | 300,491 | 29,468 |
| Other South America ..... lbs. | 82,062 | 8,326 | 159,530 | 15,856 | 1,089,062 | 80,683 | 616,048 | 53,719 |
| China, Hong Kong, and Kwantung.. lbs. | 52,536 | 5,145 | 7,352 | 605 | 344,277 | 36,494 | 971,998 | 80,618 |
| Philippine Islands ..... lbs. | 224,659 | 18,770 | 299,291 | 17,881 | 866,017 | 72,009 | 1,125,292 | 77,038 |
| Australia ..... lbs. | 97,653 | 10,945 | 116,433 | 12,263 | 517,330 | 55,122 | 473,123 | 55,493 |
| Other countries ..... lbs. | 69,940 | 6,959 | 81,582 | 6,647 | 432,047 | 42,904 | 657,774 | 54,019 |
| Cover paper ..... lbs. | 100,320 | 19,967 | 197,767 | 32,869 | 782,142 | 137,777 | 1,148,375 | 184,576 |
| Greaseproof and waterproof paper..... lbs. | 235,256 | 34,852 | 311,633 | 44,439 | 1,292,259 | 183,281 | 1,486,848 | 227,126 |
| Wrapping paper ..... lbs. | 3,057,326 | 211,698 | 2,603,069 | 195,374 | 15,910,596 | 1,143,150 | 17,785,457 | 1,288,812 |
| Surface-coated paper ..... lbs. | 629,211 | 73,340 | 806,103 | 108,475 | 3,617,455 | 443,698 | 4,438,166 | 511,361 |
| Tissue and crepe paper ..... lbs. | 319,505 | 84,314 | 419,787 | 91,707 | 2,041,525 | 473,677 | 2,777,486 | 573,773 |
| Toilet paper ..... lbs. | 515,945 | 57,319 | 473,220 | 49,346 | 2,620,784 | 333,604 | 2,759,729 | 309,245 |
| Paper towels and napkins ..... lbs. | 293,696 | 35,573 | 224,922 | 27,041 | 1,134,177 | 151,488 | 1,317,115 | 168,579 |
| Box board ..... lbs. | 4,379,555 | 123,436 | 4,135,381 | 107,348 | 24,553,226 | 757,300 | 25,295,766 | 723,423 |
| Bristols and bristol board ..... lbs. | 88,315 | 10,881 | 133,095 | 17,953 | 1,091,432 | 96,724 | 987,372 | 107,484 |
| Other paper board and straw board..... lbs. | 5,936,645 | 421,190 | 3,597,690 | 176,196 | 22,414,587 | 1,261,985 | 19,479,970 | 972,256 |
| Sheathing and building paper..... lbs. | 840,961 | 36,754 | 1,236,178 | 44,416 | 6,635 021 | 271,678 | 6,321,406 | 235,840 |
| Wall board of paper or pulp..... sq. ft. | 5,473,604 | 186,688 | 4,568,604 | 161,472 | 24,055,173 | 795,907 | 25,907,072 | 862,104 |
| Blotting paper ..... lbs. | 266,261 | 30,976 | 338,941 | 34,694 | 1,695,122 | 194,349 | 2,097,357 | 239,023 |
| Filing folders, index cards, and other office forms ..... lbs. | 80,344 | 21,653 | 129,967 | 45,624 | 563,467 | 150,868 | 774,901 | 265,497 |
| Papeteries (fancy writing paper)..... lbs. | 58,523 | 16,835 | 45,418 | 11,042 | 311,391 | 78,365 | 347,508 | 77,628 |
| Other writing paper ..... lbs. | 988,461 | 141,497 | 2,246,997 | 233,801 | 5,872,952 | 931,112 | 11,985,066 | 1,402,121 |
| Paper hangings (wall paper) ..... yds. | 1,073,669 | 24,158 | 1,578,656 | 31,674 | 15,349,548 | 341,437 | 20,852,357 | 392,691 |
| Paper bags ..... lbs. | 620,670 | 54,798 | 800,422 | 68,895 | 6,503,907 | 557,882 | 4,278 576 | 396,213 |
| Boxes and cartons ..... lbs. | 2,308,906 | 147.587 | 2,364,811 | 143,861 | 11,399,881 | 764,216 | 12,935,951 | 851,663 |
| Envelopes ..... lbs. | 176,749 | 29,322 | 158,603 | 25,532 | 1,310,298 | 226,261 | 1,240,027 | 204,873 |
| Vulcanized fiber sheets, strips, rods, and tubes ..... lbs. | 333,709 | 101,170 | 556,348 | 140,421 | 2,350,785 | 707,277 | 2,673,462 | 721,820 |
| Manufactures of vulcanized and indurated fiber ..... lbs. | 30,378 | 10,891 | 144,678 | 19,134 | 279,549 | 76,404 | 536,263 | 105,485 |
| Cash register and adding machine paper... lbs. | 158,842 | 18.228 | 433,362 | 41.247 | 833,712 | 90,893 | 1,305,848 | 141,019 |
| Other paper and paper products..... | ..... | 404,795 | ..... | 713,971 | ..... | 2,316,991 | ..... | 3,011,323 |

## WOOD PULP AND PAPER STOCK

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| Sulphite wood pulp ..... tons | 1,975 | 123,453 | 1,828 | 108.386 | 9,280 | 573,828 | 10,063 | 576.779 |
| Soda wood pulp ..... tons | 263 | 23,111 | 181 | 8,720 | 1,118 | 98,325 | 1,229 | 92,621 |
| Other wood pulp ..... tons | 139 | 8,851 | 137 | 6,420 | 1,849 | 67,976 | 1,236 | 69,720 |
| Rags and other paper stock..... lbs. | 23,678,006 | 306,230 | 19,750,140 | 285,786 | 114,621,444 | 1,809,972 | 119,781,024 | 2,319,779 |

## PAPER AND PULP MILL MACHINERY

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| Paper and pulp mill machinery..... lbs. | 1,392,572 | 247,738 | 907,534 | 198,646 | 11,319,071 | 2,243,410 | 8,992,464 | 1.703,558 |

## Novel Procedure for Standardization

The American Waxed Paper Association has received from the Department of Commerce its approval of a plan which, it is believed, will save many thousands of dollars of traveling expense and time in the development of its standardization and simplification program.

Instead of inviting all consumers of bread wrappers and all manufacturers of affiliated industries to attend the standardization and simplification meeting, this industry has proposed that the subject be handled by committees officially appointed or elected by the affiliated industries, which will meet with a committee from the waxed paper industry and any differences will be taken up by mail to the members of each group, if necessary, for final opinion.

Such a procedure undoubtedly will facilitate the development of this program and serves to eliminate a waste of time and money.

Paul S. Hanway, manager of the American Waxed Paper Association, has been appointed an associate of the Department of Commerce, to collect and compile data for the waxed paper manufacturers, and in conjunction with Franklin D. Jones, counsel for the association, has initiated this new idea and already has received approval from the Department of Commerce and from the American Baking Association's president, Henry Stude.

The subject is one which might well interest every group in the paper industry, not only in matters of standardization and simplification, but as a simplified method for arriving at arbitration upon various subjects, not generally understood by affiliated industries, but which require a complete and full understanding in the furtherance of peaceful relationships between the industries.

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## ATTACKING THE FORESTRY PROBLEM

A tentative program of the work of the Woodlands Section of the American Paper and Pulp Association for the coming months has been prepared which shows unusually careful thought is being given by the organization to the wood problems of the industry. In part the program states that preliminary surveys of the forestry situation in the paper industry indicate the need for systematic study of forestry from an economic point of view. The problems of forestry as a business are largely economic, and forestry is practical only in so far as economic conditions permit and only to the degree that they permit.

Too frequently forestry policies are based solely on expected future increase in prices. These may be justified in certain cases, for it is probable that prices will increase in the long run, but there is no definite information, or in fact no definite trend, to indicate the extent of these increases or when they will take place. Except in special cases the hope of liquidating high initial costs with accumulated carrying charges several years hence at a profit is a gambler's hope.

This is especially true when wood can be grown under conservative method at an outlay that is justified by present conditions. Forestry in the paper industry is, by and large, the protection and improvement of existing forests. Protection expenditures are essential; of that there is no doubt. But the expenditures for obtaining reproduction and increasing forest yields may vary through wide ranges. It is vital, then, to find out how much can be expended for forestry under present conditions and what can be expected from that expenditure.

The purposes of this study are threefold:

1. To determine by analysis of values of wood by kinds and sizes, the costs of cutting and delivering to the mill, carrying costs, the residual amount that must cover the initial cost and the accumulated charges of growing pulpwood of different kinds and sizes under present economic conditions.

2. To determine by analysis of known data and by further study how much wood of different kinds and sizes can be grown for specific outlays.

3. The coordination of these purposes to determine policies of management.

The study of each phase of the above problems will, it is believed, bring to light many facts which will be of immediate benefit to the industry. This is particularly true, for instance, in the case of transportation charges. At the present time, transportation charges may amount to as much as one-fifth of the total cost of pulpwood at the mill. Such a high percentage is plainly uneconomic. It cannot be eliminated, however, until successive crops of pulpwood are grown on lands situated near the mills.

Another immediate purpose of the study is the evaluation of pulpwood of different sizes and kinds. The per cord yield and quality of pulp from different sizes and kinds of pulpwood varies through a wide range. But how much does it vary? No careful determinations have ever been made. It is not at all improbable that pulp can be made at a profit only from wood above certain sizes. But there is no variation in pulpwood prices that would compensate for this situation. By relating yields and qualities of pulp to wood of different sizes for each species, a series of differentials may be determined that will affect immediately pulpwood purchasing policies and cutting upon company lands.

On the other side, the forestry side, information on costs of methods of obtaining reproduction and in returns from growth are meager and fragmentary. Some scattered work has been done along these lines by various companies and research agencies, but nowhere is there a complete story. The collecting of known data and its coordination will permit at once a worthwhile estimate of the economies of various forestry methods and a guide to further investigations.

This study will be conducted for each of the major pulpwood regions, and will be based upon average experiences and conditions in each region. It is felt that regional information of this kind will be invaluable as a check for independent studies conducted by individual mills. Moreover, it will emphasize the business aspects of forestry by interpreting its technicalities into business terms for the benefit of the industry's executives.

It is realized that such a comprehensive study can not be adequately handled in a short period of time or with a limited working force. It is assumed, however, that the forest owning companies of the industry will cooperate in the following manner:

1. To supply information already available (largely costs) as a basis for preliminary alignment of the study.

2. To conduct studies which fit into this program, to check and amplify information requested in No. 1.

3. To assist in preparation of requests to various forest research agencies for specific investigative work which is in line with this program, and to urge collectively and through the Woodlands Section a sufficient appropriation of funds to handle adequately the requested study.

A part of the preliminary information will be obtained in connection with the survey of progress in forestry. This will be amplified and checked by the secretary through conferences and correspondence. By this means a set-up of what is known and what is not known will be made as a basis for No. 2 and No. 3. What is not known must be tackled promptly and systematically by one of two means: by private research and by public research, including schools and organized research bodies.

At the outset it is planned to recommend minor studies only to the companies. Each study will be duplicated in each region and whenever possible by several companies within regions. As the company forces become more accustomed to this type of work and as the program gains the approval of the company executives, its scope and character will be increased.

There is no reason why public agencies can not help in this work, and it is felt that a series of studies should be proposed to various agencies and backed solidly by the industry. The fact that the industry is attacking its forestry problem in a broad way, and that the industry is itself working constructively on such a program, should go far toward enlisting the aid of the public agencies.

In order that the work may proceed as rapidly as possible, it is proposed that all matters pertaining to this program and to this work be conducted between individuals of companies rather than through the company organization, and all matters pertaining to the conduct of investigative work and its costs be handled with the companies through the individual of the companies.

## President Smith Addresses Local Unions

[FROM OUR REGULAR CORRESPONDENT]

ALBANY, N. Y., September 24, 1928.—William R. Smith, president of the International Brotherhood of Papermakers with headquarters in this city, was the principal speaker at a meeting Sunday of the newly formed local union at Harrisville and on the same day addressed a meeting of the Black River Local. Mr. Smith, who made the trip from this city by automobile, later motored to Kingston, Ontario, to pass a few days vacation.

The Canadian paper centers are getting the greatest attention at present in the organization plans of the Brotherhood. The organization force in Canada has been augumented by the addition of Frank P. Barry, vice president of the Brotherhood, who heretofore has been in charge of the work in Northern New York. Mr. Barry was sent to Canada for special work and will spend some time in the Dominion.

Edward S. Alden, of Holyoke, Mass., sales manager for union watermarked paper, was a visitor at union headquarters recently to confer with President Smith and Secretary Arthur Huggins as to ways and means for increasing the use of the union watermarked paper. Efforts are now being made to have the union marked paper used in connection with all national campaign literature. If these efforts are successful it will mean much, it is said, to the mills at Potsdam, N. Y., Taylorville, Ill., and Holyoke, Mass., which manufacture this paper for the union.

## An Unusual Record

MOSINEE, Wis., September 14, 1928.

Editor PAPER TRADE JOURNAL:

One of our beater engineers, Michael H. Ward, aged 82, is just retiring from active paper mill work, having completed a constant service in paper mills since 1861. I think it would be very interesting to make inquiry as to whether there are any older paper makers in this country, as I am inclined to think Mr. Ward's record of service to this industry from 1861 to 1928 is unique. Would you care to give this some publicity and determine if any one's continuous record compares with Mr. Ward's? I think a campaign on your part to determine these facts would be very interesting to the entire trade.

NORMAN S. STONE, Gen. Mgr.,
Mosinee Paper Mills Co.

[This certainly is an unusual record. If this record, however, can be surpassed, we agree with Mr. Stone that it would be of considerable interest to the readers of the PAPER TRADE JOURNAL to learn of it.—THE EDITOR.]

## Big Pulp Imports on the Hudson River

[FROM OUR REGULAR CORRESPONDENT]

ALBANY, N. Y., September 22, 1928.—Importations of wood pulp this season by the A. P. W. Paper Company by way of the Hudson River reached a new high record with the arrival here this week of another large ocean steamer with a capacity cargo from the Sheet Harbor mills of the A. P. W. Pulp and Power Company. The ship arrived from New York without mishap and tied up at the barge canal terminal near the A. P. W. plant. A force of men under the direction of Donald G. Kibbey, traffic manager of the company, immediately began the work of unloading the pulp. The use of the new traveling crane installed by the company last spring greatly facilitated the work of unloading.

The A. P. W. Paper Company has been importing wood pulp from the Nova Scotia mills by way of the Hudson for the past three seasons but the total tonnage brought in this season will greatly exceed the figures for any previous season. Imports to date are said already to show a big increase over the total for last season. This is due largely to the fact that the company is in a position to handle a larger tonnage because of the availability of the new warehouse, which has a large storage capacity, and special handling machinery.

Other shipments are expected by the company before the season closes. It is the intention of the firm to continue the service until the close of navigation on the Hudson.

The A. P. W. Paper Company since it entered the field as an importer of wood pulp has built up considerable business in this line among paper mills of the Upper Hudson region. A good percentage of the pulp brought from Nova Scotia is used in the company's North Albany plant which, with completion of additions now under way, will double its consumption. However, with the increase in shipments during the summer and the greatly enlarged warehouse facilities the company is able not only to supply its own needs but to furnish a year around service to its customers.

Imports of wood pulp may become one of the leading products handled through the Port of Albany in the not distant future it is indicated by port authorities and pulp importers in New York city and elsewhere. New York city firms dealing in foreign pulp and paper mill supplies have assured local officials of their intention to make Albany the distribution point for New York State and New England just as soon as sufficient facilities are available at the Albany port for the proper handling of cargoes. By next spring when navigation on the Hudson reopens port authorities expect to have temporary warehouses, docks and handling facilities sufficient to take care of the increased pulp shipments expected next year.

## Clyde and Sissiboo Mills To Be Sold

MONTREAL, Que., September 24, 1928.—The properties of the Clyde and Sissiboo Pulp Company in Nova Scotia are to be put up for sale by auction next month and the proceeds allotted to the first mortgage bondholders through the receiver. The company has two large wood pulp mills at Port Clyde and Weymouth, N. S., with a capacity of 3,000 tons per annum. It owns 31,000 acres of freehold timber limits and 45,000 acres of leasehold limits, as well as two water power sites. Its product has been shipped to English paper mills.

The company has had a checkered history. The controlling interest of the common stock was held by Edward Lloyd limited, of London, England. As long as the English interests remained in control of the company they guaranteed as to principal, interest and sinking fund, the outstanding $500,000 6 per cent. first mortgage sinking fund bonds which are due February, 1943. As Edward Lloyd Limited have given up their control of the Clyde and Sissiboo Pulp Company, it is of course, no longer responsible for the obligations which it undertook with regard to the first mortgage bonds. Hence the proposed sale of the property.

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Section of the
Technical Association of the Pulp and Paper Industry

AN ORGANIZATION FOR THE ENCOURAGEMENT OF ORIGINAL INVESTIGATION AND RESEARCH WORK IN MILL ENGINEERING AND THE CHEMISTRY OF PAPER, CELLULOSE AND PAPER-MAKING FIBERS GENERALLY; IT AIMS TO PROVIDE MEANS FOR THE INTERCHANGE OF IDEAS AMONG ITS MEMBERS IN ORDER THAT PROCESSES OF MANUFACTURE MAY BE MADE MORE EFFICIENT AND IMPROVED ALONG TECHNICAL LINES.

Edited by
RONALD G. MACDONALD, Secretary

# Current Paper Trade Literature

## Abstracts of Articles and Notes of Papermaking Inventions Compiled by the Committee on Abstracts of Literature of the Technical Association of the Pulp and Paper Industry

Clarence J. West, Chairman

### Raw Materials

**Utilization of "Kaoliang" Stalk. I. Digestion of the Stalk by the Soda Process and Effect of Preliminary Treatment on the Digestion.** R. Yamamoto. J. Cellulose Inst., Tokyo 4, 53-66 (1928). A relatively easy-bleaching soda pulp can be obtained from the stalk of "Kaoliang" (*Andropogon sorghum*, Broth.) if the material is pretreated with hot water. Thus, by digestion first with water at 100 to 120 degrees C. for half to one hour and then, after removal of the aqueous liquor, with 12 per cent of caustic soda at 130 to 140 degrees C., for three to four hours, a 46 per cent yield of light brown pulp was obtained which bleached with 2.97 per cent of available chlorine, giving a 36 per cent yield of bleached pulp. It is estimated that the annual production of stalk is about 14,400,000 tons.—A. P.-C.

**Delignification of Jute Fiber.** J. K. Chowdhury and R. K. Das. J. Indian Chem. Soc. 5, 231-243 (1928). Phenols, in particular beech wood creosote (Merck), remove the lignone complex from jute without affecting appreciably the cellulose. When creosote alone is used, the fiber becomes brittle, but with creosote and 10 per cent pyridine the tensile strength of the product is fairly good. The effect of water at high temperatures is to reduce the fiber to a pulp, whilst excess of pyridine causes a diminution in the cellulose content. Maximum delignification with creosote plus pyridine is obtained at 193 to 195 degrees C. and 28 to 30 atmospheres' pressure for four hours. The beta cellulose content of the resulting fiber is still fairly high, and it is removed partly by treatment with hot 5 to 6 per cent sodium hydroxide solution. The resulting fiber retains its original color and is of good tensile strength.—A. P.-C.

**Rational Utilization of Broke and of Waste Papers.** Anon. Papeterie 50, 306-313 (Apr. 10, 1928). A discussion of the proper methods of reworking broke (both wet and dry) and waste papers. —A. P.-C.

**Bamboo. I. Composition of the Bamboo "Moso-Chuku."** Y. Ueda, K. Kasama and K. Kimura. J. Cellulose Inst., Tokyo 4, 95-98 (1928). The Japanese bamboo "Moso-Chiku" contains (approximately): water 8 to 9 per cent, cellulose 42 per cent, lignin 24.5 per cent, pentosans 23 per cent, alcohol and benzene extract 3 per cent. The cellulose obtained from the dried product by the chlorination method has the following characteristics: furfuraldehyde yield 4 per cent, copper value 0.7 per cent, alpha cellulose 79 per cent, beta cellulose 18 per cent, gamma cellulose 3 per cent. The yields by acetolysis and sulpholysis are 27 and 80 per cent respectively, while hydrolysis by 7 per cent sulphuric acid gives xylose crystals amounting to 3.7 per cent of the weight of the dry cellulose taken.—A.P.-C.

**Bamboo for Paper Making.** W. Raitt. Proc. Tech. Sect. Papermakers Assoc. 8, 89-98 (1927). The claims of bamboo as a practically inexhaustible source of paper pulp are advanced. The earlier difficulties of preparing bleached bamboo pulp have been overcome and the waste due to nodes has been eliminated by crushing. By adopting fractional digestion in conjunction with the sulphate-soda process it is possible, using 16 per cent of soda for 5 hours at 24 pounds per square inch, to obtain a 45 per cent yield of pulp requiring only 8 per cent of bleaching powder (yield of bleached pulp 42 per cent). It is estimated that unbleached bamboo pulp could be delivered (c.i.f. British ports) at 11 pounds 10 shillings (approximately $56) per ton.—A. P.-C.

**Lignocellulose of Victorian Mountain Ash (Eucalyptus Regnans).** H. W. Strong. J. Soc. Chem. Ind. 47, 87-90T (1928). In the determination of the cellulose in *Eucalyptus regnans* it is shown that it is necessary to extract the sample with alkali hydroxide, and that this is best achieved by heating at boiling temperature for not more than 1 hour with 1 per cent sodium hydroxide solution. More concentrated solutions of alkali give diminished yields of total cellulose with a smaller content of alpha cellulose. The amount of chlorine reacting to form hydrochloric acid is approximately twice the amount of chlorine combining with the lignin, the latter being 7.5 to 8 per cent of the oven dry sample.—A. P.-C.

**Recovery of Waste Fibrous Material Associated with Bituminous Substances.** L. Kirschbraun. U. S. pat. 1,659,401, Feb. 14, 1928. Material such as waste tarred paper is subjected to the detergent action of bentonite in the presence of water and to heat and pressure to separate bituminous material from the fiber and form an amulsion with the bentonite.—A. P.-C.

**Poplar as a Raw Material for Paper Making: Micrographic Study.** L. Vidal. Papier 31, 393-397 (Apr. 1928). A discussion of the merits of poplar from a papermaking standpoint, particularly to meet conditions in France, with a description of its micrographic characteristics. Its advantages for the manufacture of groundwood are particularly stressed.—A. P.-C.

# A Rotating Disc Machine for the Measuring Pulp Color*

By Chester G. Landes[1]

As a high color has become one of the most important sellings points in the soda pulp market, the measurement and routine control of the color has correspondingly been given increased attention.

For some years at Kingsport an Ives colorimeter had been used for grading the pulp color. However, this instrument is unsuited for rountine work, and due to several mechanical defects, its results have been open to question. Its use has been abandoned. A short time ago a rotating disc machine was received, and tried out for our soda pulp. It was made by mixing up discs according to the following formula:

**Disc Composition**

| Disc. No. | Water | Plaster Paris | Pot. Chromate | Burnt Umber |
|---|---|---|---|---|
| 85 | 120 cc | 214 grams | 0.770 grams | 0.0856 grams |
| 80 | 120 cc | 214 grams | 0.856 grams | .1712 grams |
| 75 | 120 cc | 214 grams | 1.068 grams | .2140 grams |
| 70 | 120 cc | 214 grams | 1.460 grams | .3000 grams |
| 65 | 120 cc | 214 grams | 2.300 grams | .4600 grams |
| 60 | 120 cc | 214 grams | 3.500 grams | .7000 grams |

After several months trial the above machine was found to be unsatisfactory for our purpose. The reasons for its unsuitability may be summarized as follows:

1. The shade or hue of the wheels did not match that of our soda pulp except in the lower range.
2. The great variety of materials used made it impossible to duplicate the wheels within five points of the discs sent down to us.
3. There is no guarantee that the discs do not change with use. In fact the use of a substance soluble in water, such as the potassium chromate, makes it probable that the discs will change.
4. No information was at hand of the optical properties of the discs, the most important characteristic, for this work.
5. It was almost impossible to read the discs accurately, due to the fact that the pulp matched the discs as to saturation at one place, and as to brightness at points around 20 units apart on the scale.
6. The discs as made by the above formula do not read high enough, and to make ones that read higher, it is necessary to change the hue, which of course adds to the difficulties in reading.

In the course of experimenting on an improved set of discs, many formulas were tried, but no satisfactory ones were found. It was found to be extremely hard in making new discs as the amount of chemicals or pigments in a wheel has a very complex relation to the change in optical properties.

Finally the idea was conceived of making all the discs alike, and pasting varying sections of colored paper on them. This offered a very definite and quantitative way of changing the difference between wheels, and also enabled other properties to be controlled more easily.

Accordingly, by empirical methods in most cases, a satisfactory set of discs was made up. A plaster of paris background was

After it was completed many tests were made on its standardizaused, and sectors of yellow and green tinted filter papers provided the color.

tion, properties, etc. The most important points in the consideration of the value of the machine were: (1) its accurate and easy reading, (2) its ease of exact reproduction, and (3) its assurance of permanent readings.

The detailed methods of making and using the discs, to insure the fulfillment of the above three requirements are given below.

The machine itself consists of a number of brass discs 6 inches diameter by about 3/8 inch deep, rotated by a 1/10 hp. motor at 1,700 r.p.m. The actual diameter of the plaster of paris face is 5¼ inches. A nut is furnished in the center for holding the pulp samples, which are cut 3 inches in diameter.

The filling for the discs is made as follows: 214 g. of plaster of paris is mixed with 120 cc. of distilled water, and the mixture put in the disc. After drying 48 hours, it is smoothed down and sanded. The plaster of paris used was the technical grade, as furnished by the Fisher Scientific Company. A sufficient supply of this was obtained to keep as a standard.

The papers for the discs are made up as follows: 100 c.c. of distilled water is pipetted into a porcelain dish about 6½ inches in diameter, then 10 cc. of yellow Higgins' waterproof drawing ink is added. The water is kept at approximately 25 degrees Cent. Into this is dipped, for exactly two minutes, a 15 cm. No. 1 Whatman filter paper. The paper is held by a small piece of wire, and when removed, is allowed to air dry in a dark place. It is then removed as soon as dry and placed in a heavy dark envelope. Enough papers are made with one saucer of ink to make a complete set, but not more than possibly 5 or 6 should be made with one batch as the amount of dye may then be changed too much.

A set of papers using green Higgins' waterproof drawing ink is made in exactly the same manner.

For the various discs, different sectors of the papers are used, as follows:

| Disc. No. | 102 | 98 | 94 | 90 | 86 | 82 | 78 | 74 | 70 | 66 | 62 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Degrees Yellow | 20 | 30 | 40 | 50 | 60 | 70 | 80 | 90 | 100 | 110 | 120 |
| Degrees Green | 6 | 9 | 12 | 15 | 18 | 21 | 24 | 27 | 30 | 33 | 36 |

The wire side of the papers is used in every case, as there is quite a two-sided effect on the filter papers. As our discs rotate in opposite directions alternately, the papers were always placed so the yellow comes first, and the green second. This is to remove any color difference due to retinal fatigue. The above proportion of yellow and green was, of course, chosen to match our particular soda pulp shade, and may have to be varied for different pulps.

The above numbering of the wheels was entirely arbitrary, the numbers having no special significance. We chose them to suit our particular pulp color. Note that on the scale, a pure white pulp would be above 100. The four point difference between the discs, however, has been much more satisfactory than five points.

Great care should be used in following the details of making the discs. The angles should be measured very closely. When the papers have just been made and are drying, care should be exercised that the papers do not touch one another, or uneven coloring will result. Drops of liquid should be removed by a blotter from the bottom of the paper while hanging.

The papers should be pasted to the discs with a paste which is not too liquid, or the water will soak through the paper and discolor the disc. It has been found convenient to paste only the ends of the paper to the disc, making removal easier when the papers are changed.

The color room in which our machine is placed is lit by two daylight lamps, 500 watts each, placed about 4 feet above the level of the discs. The discs are placed about at the eye level.

### Use and Care of the Machine

The greatest care must be used in order to keep the machine accurate. The discs should be kept as clean as possible, and should be changed according to a regular schedule. Although the discs can not be sanded while rotating, because of changing the papers,

* Presented at Fall Meeting of TAPPI, Wausau, Wis., September 27, 1928.
[1] Junior Member TAPPI; Chemist, Mead Fibre Co., Kingsport, Tenn.

they can be sanded to some extent without rotation, care being taken to not touch the paper that is pasted on the disc. This will keep the plaster of paris fairly clean. Of course, the disc can be sanded good when the papers are changed.

A regular schedule is used and posted in the color room showing when the papers were changed. New papers should be put on the discs every two weeks.

The standard supply of ink should be kept in a dark place, and where not too warm. Data on permanency of the dye is given later in this report.

Several miscellaneous instructions for the use of the instrument are as follows:

(1) All tests should be made by the same operators.

(2) No one can expect to read the machine satisfactorily without several weeks constant practice and study of the instrument.

(3) The lights in the color room should be turned off at all times, except when tests are being made, to keep the fading of the papers at a minimum.

(4) The pulp should be matched as to "whiteness," or saturation, and not as to brightness.

(5) At least three discs of pulp, 3 inches in diameter, should be cut and used in making the readings.

(6) The pulp samples should always be moved so that the matching point is near the middle of the set of samples.

(7) Make readings, using the smooth side of the pulp for observation.

(8) Be sure the pulp discs are centered carefully on the plaster of paris discs.

(9) The best distance for reading is for the eyes to be about 12 to 18 inches from the discs.

(10) It is best to read several pulp samples at one time, in order to show up the contrasts better, and to allow the eye time to become accommodated to the light in the room.

### Accuracy and Permanency of Discs

In the matter of a permanent colored paper it was of course desired if possible to get one that did not fade. However, with our limited time for research, we could not obtain this, so the next best thing was to get one that, although fading to some extent, could be reproduced accurately as often as desired.

After several attempts, the easiest method found was to use Higgins' drawing inks, as described in the procedure. Upon writing to the manufacturers of this ink, they stated that it was constant in liquid form for two years, and was of a standard color and depth at all times. A quart each of yellow and green inks was obtained and kept in a dark place for the standards. I have no knowledge concerning the type of dye used in these inks. A good subject for research would be the finding of more permanent dyes for the papers which are easily duplicated.

To test the fading of the papers, after made, one each of the green and yellow papers was exposed to the constant light from one daylight lamp, for some time. Each day the papers were read on the Ives colorimeter. There was no appreciable change until after 48 hours, when the fading became noticeable. If the discs are kept in the dark with the exception of 10 minutes per hour, all day, it can be seen they should last two or three weeks without changing enough to affect the disc reading.

Although this indicates that the readings should remain constant for a while, it was thought necessary to prove this point more definitely. Accordingly the first time the papers were changed on our machine, several pulp samples were read before and after changing, and the readings compared with each other. This gave a very severe test on the machine as many factors might have made a change. The results on the samples were as follows:

| Sample | Reading by T. (old papers) | Reading by L. (new papers) |
|---|---|---|
| 1 | 91 | 89 |
| 2 | 82 | 83 |
| 3 | 86 | 85 |
| 4 | 87 | 85 |
| 5 | 84 | 86 |

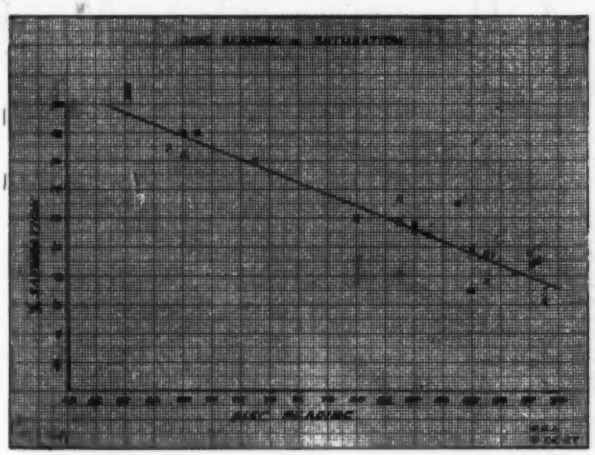

FIG. 1

These results seem to show conclusively that the readings are constant. The first set of papers had been on the discs for twenty-three days, when they were changed. Later tests showed that with heavy exposure of the papers to light the readings were raised several points by the end of three weeks. Accordingly we change papers every two weeks.

### Analysis of Optical Properties of the Machine

Most of this work was done with an Ives colorimeter. Some of the methods used are approximate. However, they served the desired purpose of analyzing the disc machine.

Tests were made on the various materials used, and are given below.

IVES READINGS

| Materials | Red | Yellow | Green | B-G | B-V | Neut. | Calculated brightness |
|---|---|---|---|---|---|---|---|
| Plaster of Paris | 84.5 | .. | 82.7 | .. | 83.2 | 83.5 | 83% |
| Yellow papers (average) .. | 91 | 90 | 53–57 | 30 | 20–25 | .... | 68% |
| Green papers (average) .. | 31 | 45 | 72 | 80 | 73 | .... | 57% |

The next step was to read a number of pulp samples, on both the Ives and disc machine, and work out the relationship of the various properties. The samples were various pieces from our production of the last several months.

Twenty different samples were read, and from the results, the following relationships were drawn: Fig. 1 shows the relation between the disc reading and the pulp saturation. This is the principal basis of the readings. Fig. 2 shows the relation of the pulp brightness to the disc reading. This shows greater variation and is not as uniform as the saturation curve. Fig. 3 shows the correlation of the pulp brightness and the pulp saturation. This, of course, would be a straight line for uniform pulp but varies with the different operating condition.

One of the faults in the disc machine is brought out by the figures obtained. Below are tabulated the brightness of the various discs themselves, as compared to the brightness of matched pulp samples.

| Wheel No. | Brightness of wheel | Brightness of matched pulp |
|---|---|---|
| 70 | 76.7 | 79.2 |
| 74 | 77.3 | 80.7 |
| 78 | 77.9 | 82.3 |
| 82 | 78.6 | 83.8 |
| 86 | 79.2 | 85.3 |
| 90 | 79.8 | 86.8 |
| 94 | 80.5 | 88.3 |
| 98 | 81.1 | 89.8 |

The brightnesses of the wheels were calculated by taking the mean brightnesses of the components. It is seen that the brightnesses of the pulp and wheel do not correspond except at very low readings. This is why the disc machine is harder to read with high colored samples. This can probably be remedied by brightening up the wheels with magnesia, to match the pulp brightness.

### Suggested Improvements of the Machine

(1) The first and most important improvement should be to

match the brightness of the wheels and the pulp, as outlined just above. This will improve the readability and accuracy of the instrument greatly.

(2) No doubt with better instruments, and further experimentation, the shade or hue of our soda pulp could be matched more closely by the discs. This would also give better readings. The hue of the present discs was only obtained by "cut and try" methods.

(3) A very good problem for research would be the whole revision of the method of dyeing and making the papers. A much more permanent and standard dye or pigment could be found, and refinements made in a standard method of dyeing. This, of course, would take a great deal of time and experimenting.

(4) Very great refinements in the standardization and calibration of this machine could be effected, if we had the proper equipment of a color laboratory to work with. With a spectro-photometer a very accurate deduction could be drawn. Possibly work of this nature could be done at some university, where the equipment is available.

### Discussion

The disc machine as described in this report has given satisfaction in actual use. In addition to being used in the routine control of our pulp color, the machine has been used considerably in the comparison of samples in bleaching experiments, as it gives a very good quantitative comparison of any number of samples. Also by making special slush sheets, it has been found possible to get out accurate color results on slush pulp within forty-five minutes from the time of sampling.

However, close sight must be kept on the correct field of use, and limitations, of this type of instrument. It is intended as a routine tester of pulp. Many competitors' pulps, and many sulphite pulps can be read very well on the machine. But when any unusual color condition occurs, the disc machine must not be blamed if it does not seem to check up with the eye.

For instance, suppose a sample of soda pulp is tested to which the manufacturer has added blueing to get a better color. This causes a whiter pulp, that has a lower saturation, and a higher disc reading. However, at the same time the pulp is made much duller by the blueing. This adds both more difficulty in reading the disc machine, and comparing the samples by eye. A case like this illustrates where the proper field of a regular colorimeter lies, to interpret accurately the actual condition of the pulp.

The effect of unusual variations is shown in Fig. 3. If operation were absolutely uniform the saturation should vary directly with the brightness. In such a case the disc machine would be more nearly fool proof. However, this lack of variation will never

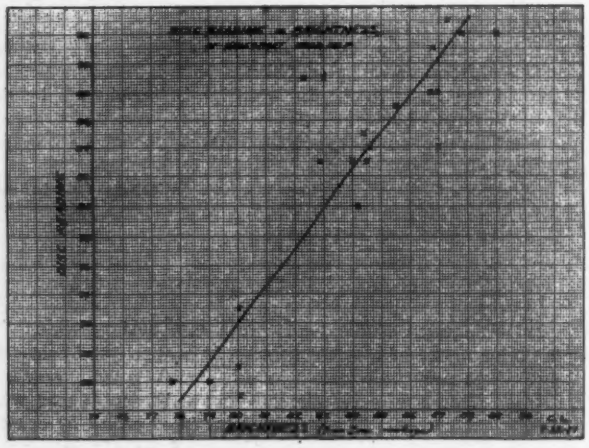

FIG. 2

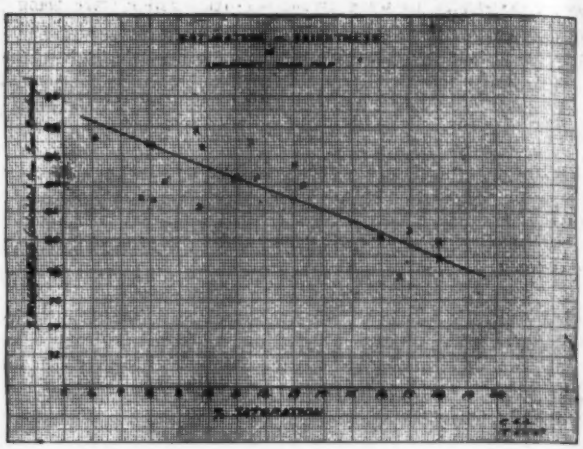

FIG. 3

be obtained, so any unusual condition must always be allowed for in using the disc machine.

As explained before, the work on the disc machine can only be considered approximately accurate, due to the very limited facilities both in equipment and literature, that were on hand to undertake a problem of this nature. At any rate, it is thought that some improvement of the old disc machine has been accomplished.

### Summary

1. The construction of a rotating disc machine for the routine control measurement of soda pulp color, more reliable and easier to read than heretofore, is described.

2. Tests have been made giving the accuracy, permanency, ease of reproduction, and standardization of the above instrument.

3. Several limitations of the instrument are described, together with suggested research on methods of improvement and elimination of the faults described.

## Bibliography Orders

In response to the advance publicity issued by TAPPI relating to the "Bibliography of Paper Making" several orders have been received. The first order was received from Prof. Ralph H. McKee of Columbia University.

It is expected that the paper and pulp industry will strongly support the sale of this very valuable reference book, the work of one of America's foremost bibliographers—Dr. Clarence J. West, a member of the Technical Association and in charge of the Research Information Bureau of the National Research Council in Washington, D. C.

The Bibliography represents the cumulative efforts of many years of work on the part of the compiler and will when issued represent an expenditure of more than ten thousand dollars. Advance orders for this limited edition are being received by the Technical Association at 18 East 41 street, New York. No price has yet been set for the book but it is not expected to exceed ten dollars per volume of nearly fifteen hundred pages.

## Manganese Steel

The American Manganese Steel Company has recently issued a very attractive, pocket size brochure entitled "The Manganese Steel." It thoroughly describes Amsco manganese steel as to its history, advantages and application, dwelling mostly on facts, and giving to buyers of alloy steel parts and the engineering fraternity a short, interesting summary for quick interpretation, and a complete knowledge of manganese steel and its advantages.

A copy may be obtained by writing to the American Manganese Steel Company, 333 North Michigan avenue, Chicago.

# Paper From Cornstalks*

By E. F. Hulbert[1]

The cornstalk pulp development concerning which I have been asked to present a paper for the TAPPI Meeting, started from a process evolved by Dr. Bela Dorner of Budapest, Hungary, who, for upwards of ten or twelve years carried on a series of experiments and tests in the Government Laboratories of which he is Technical Director. Inasmuch as a great deal has been written and published in technical journals in this country concerning the Dorner process, I will only mention the fact that it is one that involves less drastic handling of the raw material than any that has heretofore been used or attempted in the recovery of cellulose from cornstalks; also it makes use of the complete growth with the exception of the cobs and the corn itself. In other words, stalk, pith, leaves, node fibres and all find their way eventually into the digester and carry through and emerge in the finished pulp.

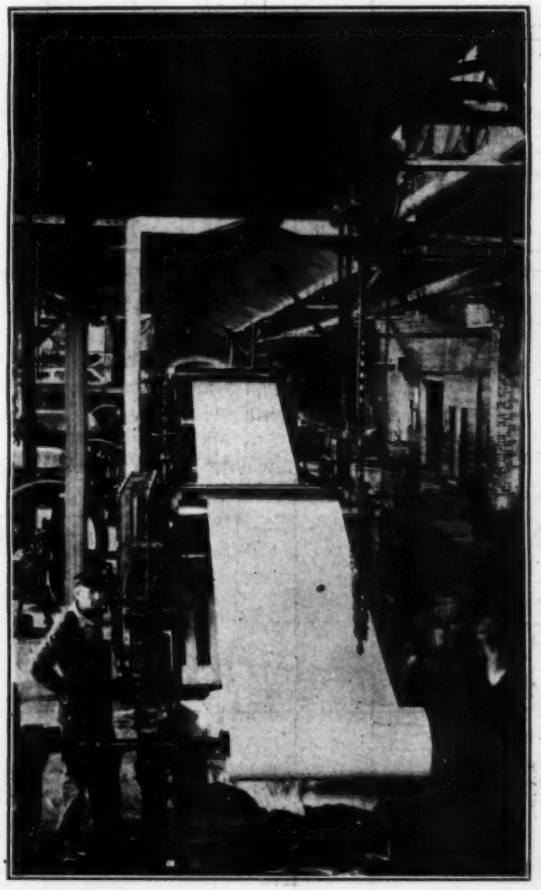

FIG. 1
Raw Material—Six Hours Elapse—Finished Pulp

The fact that there is no selection of fibres from the plant growth accounts for the process showing comparatively high yield in cellulose recovered as compared to previous attempts.

### The Dorner Process

Dorner's process was brought to this country and financed at the beginning by W. Jule Day of New York City. Dorner was brought over here and sufficient equipment installed to make test runs on a laboratory scale, the idea being at the beginning to recover high alpha cellulose which would be of a quality desirable for conversion into artificial silk or rayon. Out of these tests grew the Euromerican Cellulose Products Corporation, and its subsidiary company, the Cornstalk Products Company. The laboratory experiments were continued and enlarged upon and later on, in the Fall of 1927, the present plant site and buildings of the Cornstalk Products Company were acquired. It was at this period, late in November, 1927, that the writer first came in contact actually with the development, being called in to make an examination and report of what had been done, for a group of Chicago capitalists and found that the Cornstalk Products Company was proceeding with the construction of a pilot or test mill at Danville, in which they expected to produce on a semi-commercial scale, high alpha cellulose. The interesting feature to the writer was the fact that the yields as evidenced by the work done in the small test plant in New York City were apparently from 35 to 40 percent of the dry weight of the stalks treated and that basically the raw material costs per ton of finished pulp would apparently be a fraction of the cost of wood pulps.

Much of the pulp produced in the small test plant in New York showed evidence of adaptability to the production of certain

* Presented at Fall Meeting of TAPPI, Wausau, Wis., September 25, 1928.
[1] Chief Engineer, Cornstalk Products Company, Inc., Danville, Illinois.

grades of paper. The interesting features mentioned resulted later in the writer undertaking to design and build the pilot mill anl later a larger operation, looking to the production not so much of alpha cellulose, as to a practical pulp for the use of the paper maker.

### The Danville Mill

This work has begun at Danville about the end of December 1927 and involved a reconditioning of a group of old buildings, the construction of proper boiler house and the working out and fitting together of plant process equipment necessary to carry the cornstalk through to the finished pulp. It was generally thought at the beginning that much of the theory and practice worked out in wood pulp production would apply to corn, but we have found that the processes are not alike and treatment that could be given to wood pulp under certain conditions would get no-where in the production of corn pulp.

The first few months were given over to he construction of a pilot mill that would handle a thousand pounds of finished pulp per day.

The first few months were given over to the construction of a developed for the gathering and recovery of the waste stalks from the corn fields within a radius of twenty miles of Danville. This phase of the business is a very vital one and is, of course, the basis on which the calculations of final production costs must be made. Harvey J. Sconce, of Sidell, Ill., a man who has been prominently identified with large farming operations and corn development and growing for many years, has been in charge of that phase of the Cornstalk Products Company's operations. Through the fall and winter of 1927 and early in 1928, he and his field crew successfully gathered, baled and delivered to the yards of the Company's plant, approximately 10,000 tons of stalk. This was done through a most unusually wet season, the fields being at times completely under water. The final result was the gathering of waste stalk and delivering it to the mill at a price that makes the whole proposition commercially attractive. This has been definitely proven.

FIG. 3
**Research Laboratory**

The Company has also undertaken a program of corn growing and testing, involving approximately one thousand acres, which is aimed to result finally in a definite knowledge of what varieties of corn are best suited for both the farmer and the pulp mill operation and to determine uncertainties now existing as to green stalk tonnage per acre and best method of gathering, handling, etc.

The present year will undoubtedly show a very marked reduction in the cost of gathering stalk and delivering it on the mill yard, baled and ready for the plant operation. The Company has expended a tremendous amount of labor and effort in proper development of this phase of its business and the money outlay has been heavy.

It is virtually a certainty that no established paper mill operator would ever have been induced to undertake and carry through the program that was undertaken and carried through by the Cornstalk Products Company to harvest stalk on a large scale, and to definitely determine the possibilities of a commercial success or failure in collecting this raw material. The appeal to the paper mill operator would hardly have been sufficient to have induced the necessary expenditure involved. This pioneering work remained for a group of men outside of the paper industry,

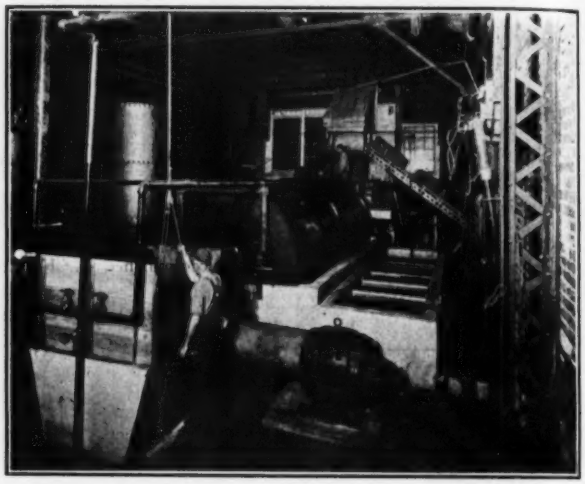

FIG. 4
**Shredding and Washing Cornstalks**

who went at it with plenty of enthusiasm and, luckily, with sufficient capital, but more luckily still, without the restraining judgment born by years of training and contact in the production of wood pulp.

### Research and Development

It was recognized from the beginning that there would be a great deal of work involved in a systematic research and study into the chemical processes and treatment not only of the corn stalk but of other farm wastes that could be treated commercially by the Dorner process or modifications of it. The Company therefore at the beginning gathered together a competent research staff and well equipped Research Laboratory at the Danville plant. This work has been under the direction of Dr. E. R. Darling, with a well balanced staff of assistants. Dr. Darling brought with him a wide experience in the handling of cornstalks and other fibres of a like nature.

In addition to the Danville laboratory, the Company has maintained a Research Laboratory in New York City in charge of Dr. John E. Jackson, where research into certain phases of the process and application of certain by-products to commercial uses has been carried on.

Dr. Bela Dorner, the originator of the Company's basic process has spent the past six months between the plant laboratory in Danville and the New York Laboratory. The study and investigation carried on by this chemical organization has resulted in the gathering of much valuable data and the improving of both plant process and the product, the work being covered so far as possible by some eighteen process patents.

At the present time the laboratory work is really cared for by three divisions. The purely scientific research work has its own laboratory; the plant control work also has its separate laboratory and organization; the third division is organized as a testing laboratory of chemical and mechanical processes.

During the period when the Company has been working and testing with the small plant or pilot mill, the whole organization

has had to be well coordinated and the mechanical construction of the test equipment had to be flexible and quickly adjusted and changed to meet the rapid development made by close study of the product under semi-commercial production.

The investigations which the chemical staff have been making cover not only cornstalks but the recovery of cellulose from other wastes such as rice straw and hulls, oat hulls, cottonseed hull wastes from the cotton oil mills, and bagasse. These last two mentioned have particularly interested the organization and the Company has built and operated separate test plants for the recovery of cellulose from these two wastes, with surprisingly satisfactory results.

The Company's processes applied to bagasse have produced a very clean, strong, high bleached pulp, with characteristics very closely allied to the corn cellulose. Practical commercial runs of this pulp have been made and converted into board and tested out in a practical way.

### Accomplishments at Danville

As the Danville plant is equipped at the present time, the Company will be able to produce approximately 25 tons of finished pulp each 24 hours. This can rapidly be stepped up at such time as proper water supply is made available.

To sum up what the Company has accomplished in the few months of its existence, we can say:

That it has first been proven that cornstalk waste can be successfully gathered and delivered to the pulp mill, at a price that makes its commercial use as possible substitute for wood pulps an attractive venture.

That it is possible to produce a clean, high bleached, white pulp, suitable for the paper maker in the production of many grades of finished white papers, at a price below that of the chemical wood pulps.

That the yield of finished pulp will be from 35 to 45 percent of the dry weight of the stalk used.

That a sufficient quantity of raw material to operate a 100 ton

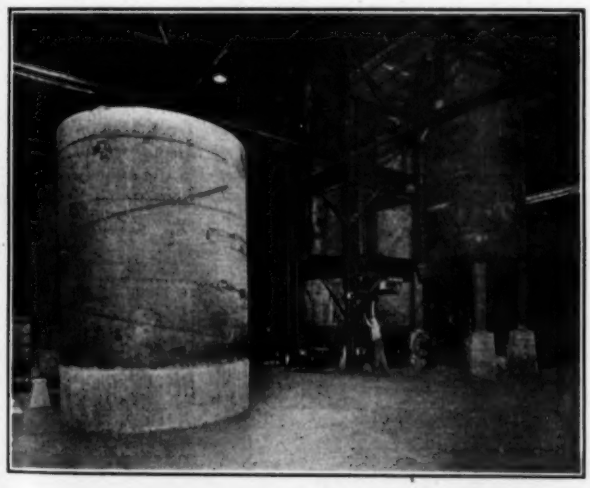

FIG. 5
**Digesters for Cooking Cornstalks**

daily capacity pulp mill can be reproduced from year to year within a ten mile radius of that operation.

That the character of the finished pulp can be more or less controlled by proper control of the raw material in growing and gathering.

That the pulp reacts very quickly to certain handling in the plant process and complete hydration can be accomplished almost instantaneously and almost as quickly it can be de-hydrated and a free soft pulp obtained.

It has been possible to reproduce almost any quality found in the finished product of wood pulp with 100 percent corn pulp.

A blending of corn pulp with small or large percentages of sulphite or sulphate pulp is perfectly practical and high grade white paper made from a mixture of 10 percent sulphite and 90 percent corn has been made commercially and at a speed equal to the straight wood pulp sheets. It will be possible to produce a corn news print the equal in strength and appearance with the present wood news.

An .016 caliper solid corn board has been made and it will show a Mullen test above 200 pounds. It will also take the

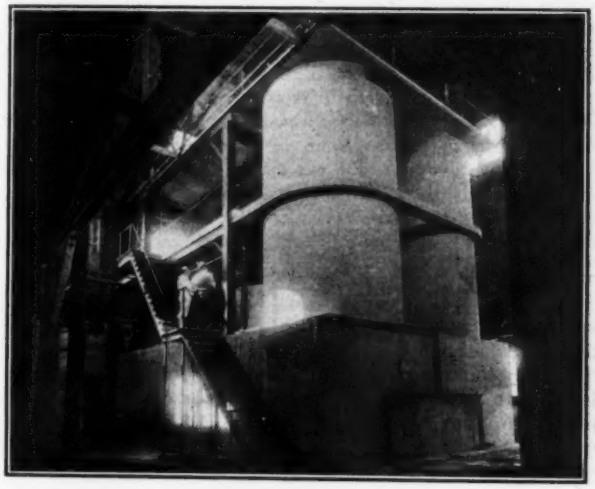

FIG. 6
**Concrete Bleaching Tanks and Stuff Chest**

coloring and finishing the same as wood pulp and has a good bending test. A corrugating sheet which will have very much greater strength than straw and will show a very high compression test has been made from unbleached corn pulp directly as it is discharged from the digester system. The cost of such a sheet will be low. A completely refined pulp can be made without the use of beaters. A completely hydrated pulp can also be produced without the use of beaters or chemicals.

### Description of Illustrations

Something of the mechanical process involved in production of corn pulp will probably be interesting to readers of this article and an outline description of the plant process and equipment follows below:

Fig. 1 illustrates the shortness of the time necessary for conversion of raw material into finished pulp.

Fig. 2 shows part of the yard storage and office and laboratory buildings of the Danville plant.

Fig. 3 shows a portion of the company's research laboratory.

Fig. 4 shows the first stage in the process of conversion of cornstalk into pulp. The bales are shown in the background going up a conveyor from which they pass into a Jeffrey breaker and are torn apart. They are discharged from this breaker directly into the washer pit where they are driven into the washer cylinder by heavy water sprays. In the foreground is shown the discharge end of the washer from which the stalk passes through the shredding equipment into a cement stock pit below. The washed and shredded stalk at about 6 percent density is pumped directly from this pit into the receiving tank of the digester system, which is shown in Fig. 5. The digester system consists of four tanks, two of which are pressure cookers and two operate on low pressures giving the preliminary and final treatment to the shredded and cooked stock. This whole digester system is a closed pressure circuit. The shredded, washed stalk enters the first tank and finally emerges from the fourth tank cooked, washed and completely defibred, ready for screens. The time

element involved here is three hours, the pressures never exceeding 30 pounds. The capacity of this group is a maximum of 40 tons in 24 hours, but was designed to handle a 25 ton per day output. The finished brown pulp from this system is sent through a rotary screen over thickeners and into high density bleaching system shown in Fig. 6. The flow sheet of the pulp from the digester system is very changeable, depending on what class of finished pulp it is desired to obtain. For certain results the brown pulp is thoroughly hydrated before entering the bleach, or the brown stock may be passed directly from the digester system into bleachers and after bleaching, it would be rubbed out and hydrated to whatever degree is desired before passing to stuff chest.

The large rectangular chambers below the circular bleaching cells are the filter wash ups. This system can be operated as a single high density bleach or as a two stage bleach. The discharge from the bleaching system is into the stuff chest below from where the stock is sent over to the wet machine.

Fig. 7: The company has installed a small three mold 48 inch machine with a bank of 30 cylinder dryers and finished pulp can be made either in wet lap rolls, or shredded and baled.

### Washing Under Pressure

The part of this process which is perhaps unique from the wood pulp man's point of view is the fact that the reduction of the raw material to the finished, washed and defibred pulp is accomplished under pressure in the digester system and that there is no blow off of the digesters in the sense that you would mention it in the production of wood pulp. The heating of the digester tanks is accomplished through the black liquor and when the cook is completed, the black liquor is withdrawn and replaced by the wash water and the pulp mass passed then to a washing tank under pressure and washed under pressure and not until the whole mass has been completely washed is it discharged to atmosphere. This system is being protected by patents and at the present time the interesting details of why and how must be left unexplained. We can say however, that tests on the reduction of wood pulp by this same system have shown a great shortening of time and steam pressures necessary. It has proven very successful in the handling of bagasse waste also.

The Company has suffered more or less from a considerable amount of undesirable publicity about its process and aims, and this in turn has produced criticism by technical men who have shown a very skeptical attitude toward the whole proposition. The Company has never given out any authoritative information as to what it was accomplishing up to the present time and

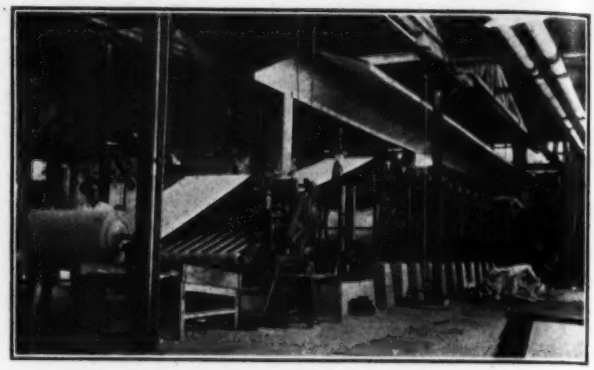

FIG. 7
Cornstalk Pulp Cylinder Machine

there is none of the organization who have any idea of suddenly revolutionizing or upsetting the pulp and paper industry. We have, however, carried on a well directed, serious minded effort to produce something practical that would be useful to the paper industry, and that would accomplish, in the long run, a reduction in the consumption of wood pulp, and in the reduction of the cost of certain grades of paper. No mill is going to upset its routine process by the introduction of an uncertain element into its every day life until, for some reason, it has been proved necessary or desirable to do it. The Cornstalk Products Company fully realizes that the technique of handling corn pulp in the paper mill is a very distinct and different technique from the handling of wood pulp and the wood pulp man must be instructed and shown its many peculiarities before he could accomplish very much with it. This will come about in the long run through hard and definite pioneering work and we hope, with the help and aid of some of the existing paper mills' personnel who are far sighted and game enough to undertake its practical application to some of their product. Work along these lines has already been started and the writer can say for the Cornstalk Products Company that we have been very agreeably surprised at the spirit of helpful cooperation shown by several of the mills who have been sufficiently interested to study and look into some of the work we have been doing and the product we have been able to produce. We believe that we have our two feet on the ground and will be able to keep them there through a rather difficult introduction period that is just opening up in front of us.

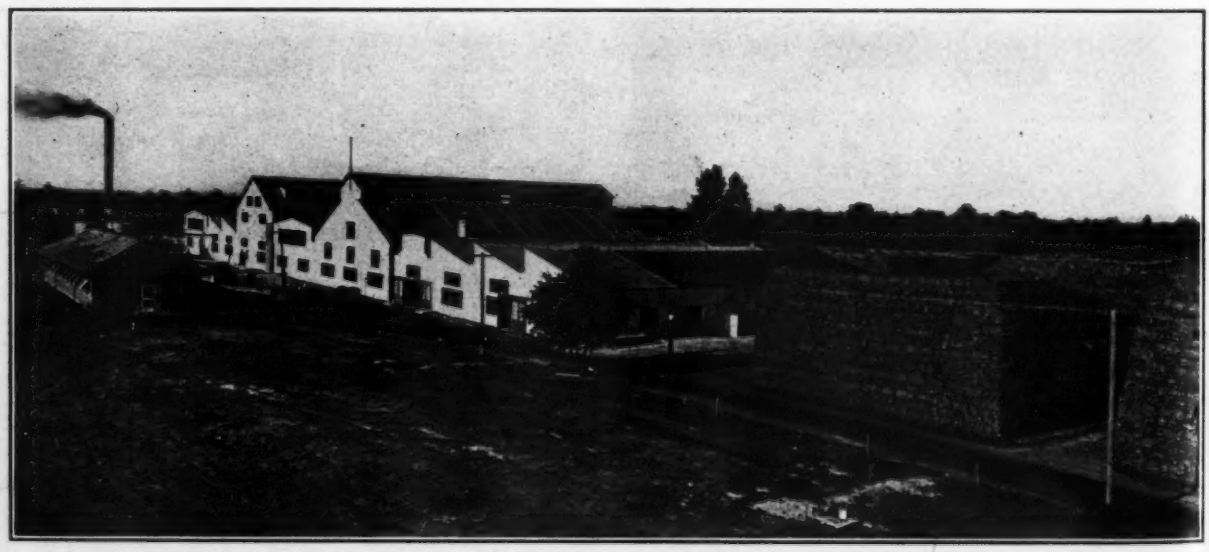

FIG. 2
Plant of the Cornstalk Products Co., Danville, Ill.

# Improvement of Paper Drying by the Application of Atmospheric Control*

By R. Skagerber[1]

It is becoming recognized more and more that paper drying is greatly influenced by atmospheric conditions. It is rather strange that this has been recognized in practically all other drying processes for years and has not been given the attention it deserves in the paper industry. It is the purpose of this paper to show the advantages of controlling atmospheric conditions in the drying section of a paper machine. It deals with drying as commonly practiced, it being recognized that in vacuum drying atmospheric conditions do not influence the operation since no air is used. But where atmospheric drying is done, requiring air to carry away the water vapor, control of this air is of utmost importance from the standpoints of economy, quantity of production, quality of paper and drying troubles in general.

Great care is taken to prepare stock for the paper machine and wet end equipment has advanced to a much higher degree of perfection in late years. But it often happens that a good sheet is spoiled in the last stages, namely of drying and finishing. Improvements have been made in construction and operation of the drying section with the view to overcome drying troubles, but, except for the vacuum drier, we are today drying ostensibly the same as we did a century ago.

The thermal efficiency of paper driers is extremely low. Probably few driers exceed thermal efficiencies of 60 per cent. It is possible, however, to attain efficiencies of 70 per cent or better by proper design and control of atmospheric conditions.

Why is it that boilers, steam pipes, condensate pipes, digesters and other heat vessels all through the mill are carefully housed and insulated to confine the heat, while the greater radiating surface of the paper driers is installed in a large airy room, walls largely of glass, roofs often poorly insulated, and great openings cut in the roofs to allow useful heat to pour out into the surrounding country? To make it worse, in many mills great quantities of hot air ranging in temperatures of from 120 to 200 degrees F. are blown up against the roofs to be expelled through the ventilators.

To alleviate this extravagant practice somewhat, hoods have been installed over the driers to confine the vapor. This helps to reduce the quantity of air exhausted but it does not stop radiation losses from the drier rolls themselves; in some instances it may increase the heat loss from the driers by increasing the air circulation over the rolls. While this type of hood performs one or two useful functions, a properly designed drier housing with equipment for controlling conditions within the housing, not only performs all the functions of the hood, but it rectifies some of the faults of the hood and performs other functions that are more important. It definitely and decidedly increases the drying capacity of the drier, improves the quality of the sheet and reduces steam consumption of the drier and of the plant as a whole. It is not difficult to figure handsome returns on such an investment.

### Conditions Required for Drying

Atmospheric conditions required for drying paper are the same as those required for drying other similar materials. Lumber, whether it be a two inch plank or a thin veneering will warp, check and crack if improperly dried. Subjecting it to a hot dry atmosphere while it is cold and wet will dry the outer layers of fibers first, causing them to shrink. The inner fibers, retaining their original conditions, will not follow the contortions of the outer fibers which will cause stresses, warping and cracking. To dry this material properly it must first be thoroughly heated through in a hot, humid atmosphere and then brought into a gradually drier atmosphere.

Similar results are obtained with materials made up of wood fibers that are "felted" or interwoven as wall board or paper. The writer was called to rectify an unbearable condition of high humidity in a wallboard plant. It was equipped to make a felted board one-half inch in thickness, but had up to that time not been able to dry board three-sixteenth inch thick. The board came out of the drier in a laminated condition so it would split down through the center; there was a damp core of fibers through the center while the outer fibers were dried hard. This condition alone would cause warping, and to bring it out into the humid room atmosphere would increase the warping.

Clearing the room of vapor was necessary, but the problem of major importance was to correct the drier so as to make one-half inch board in larger quantities than they had made the thinner board. Being the first installation of its kind on this material, there was no precedent to follow or to influence the decisions. The proposition offered these people was one that would take care of the room with about one-fifth the air that would be required if standard paper mill practice were followed, and would, at the same time, with the same air, create in the drier a condition that would eliminate the warping troubles. It was accepted and the work completed. Results were all that were anticipated, it being possible to thoroughly and uniformly dry one-half inch board at full speed with lower steam pressure. The room condition was automatically corrected and the job took 7,500 cu. ft. per minute of air, whereas a roof vapor-absorption system would have required about 40,000 cubic feet per minute.

Whether it is felted material three-sixteenth inch thick or sixty-five points or nine points thick, or a thin sheet of paper, the same phenomena occur and the remedy is the same. Cockling, curling, blistering, etc., are sufficient evidence.

The very conditions necessary for proper drying can be established in a paper drier without the addition of external humidifying equipment; the heat and humidity are there. What is needed is control and regulation of the existing conditions.

### Drier Efficiency

Since the largest factor influencing the efficiency of a drier is the heat lost through radiation and ventilation, and since this paper deals largely with the consideration of this factor, the writer has taken the liberty to set up a term for drier efficiency which could be defined as the quotient obtained by dividing the heat required to evaporate one pound of water in the drier, neglecting all radiation and ventilating losses, by the total heat that is actually consumed, i.e., adding the radiation and ventilating losses. This quotient is, of course, multiplied by 100 to get percentage.

Heat is expended, because of the drying process, for five items: 1. Heating entering water to evaporation temperature. 2. Supplying heat of vaporization. 3. Heating bone dry stock to exit temperature. 4. Heating water left in finished paper to exit temperature. 5. Supplying radiation and ventilation losses.

For the purpose of this discussion, it is assumed that the absolute B.t.u. values of the first four items remain constant, it being understood that they will be different under different conditions, i.e., for different entering temperatures of stock, for different moisture content of wet and dry sheet, for different steam pressures and different evaporating temperatures.

* Presented at Fall Meeting of TAPPI, Wausau, Wis., Sept. 26, 1928.
[1] Consulting Engineer, 1497 Chelmsford Ave., St. Paul, Minn.

Based on data obtained from tests, mill records and other observations, it is the writer's opinion that steam consumption per pound of water evaporated, all drying demands considered, in the average board mill will equal, if not exceed 2 pounds. Some tests have indicated figures well over that. Mill records may not show such figures, but these records often do not show charged against drying, steam that is used to heat incoming air that demands heat from heating apparatus, steam pipes, engines, vats, etc., in rooms adjoining the machine room. It is difficult if not impossible to obtain these figures in most mills but they can be approximated with careful survey.

The test data and calculations to be given later will show a figure of 1.71 pounds in the case of an installation designed and built according to principles described. This figure includes all heat chargeable to drying.

The following table shows the heat distribution for four cases: Case I, radiation and ventilation demands nil; Case II, the average board mill with radiation and ventilation demand shown; Case III, the test case above referred to; Case IV, same as Case III but omitting heat required to heat ventilating air from outdoor temperature to room temperature.

DATA (Assumed same for all four cases).
Type of machine: Cylinder with 3-deck drier and no drier felts.
Kind of paper: 85 pound test liner.
Moisture content of sheet: 68.6 per cent on.
4.3 per cent off.

| | |
|---|---|
| Evaporation (pounds water per pound paper dried) | 2.05 |
| Temperature of stock at wet end (degrees F.) | 56 |
| Temperature of stock at dry end (degrees F.) | 212 |
| Average temperature of evaporation (degrees F.) | 160 |
| Steam pressure in driers (pounds gauge) | 11 |
| Steam quality (assumed per cent) | 100 |
| Latent heat of vaporization | 950 |
| Specific heat of bone dry stock (B.t.u.s) | .37 |
| Weight of bone dry stock per pound water evaporated | .467 |
| Weight water left in sheet per pound water evaporated | .012 |

TABLE 1
HEAT REQUIREMENTS TO EVAPORATE ONE POUND WATER FROM PAPER

| | Case I | | Case II | | Case III | | Case IV | |
|---|---|---|---|---|---|---|---|---|
| | B.t.u. | % of total | B.t.u. | % of total | B.t.u. | % of total | B.t.u. | % of total |
| 1. Heat 1 lb. water 56 to 16 deg. | 104 | 9.16 | 104 | 5.48 | 104 | 6.40 | 104 | 8.06 |
| 2. Evap. 1 lb. water at 160 deg. | 1002 | 88.21 | 1002 | 52.80 | 1002 | 61.66 | 1002 | 77.68 |
| 3. Heat .467 lb. stock 56 to 212 | 27 | 2.37 | 27 | 1.42 | 27 | 1.66 | 27 | 2.09 |
| 4. Heat .021 lb. water 56 to 212 | 3 | 0.26 | 3 | 0.16 | 3 | 0.18 | 3 | 0.23 |
| 5. Radiation and ventilation | 0 | 0.00 | 760 | 40.14 | 489 | 30.10 | 154 | 11.94 |
| Total | 1136 | 100.00 | 1896 | 100.00 | 1625 | 100.00 | 1290 | 100.00 |
| Pounds of steam per pound water evap. | 1.2 | | 2.0 | | 1.71 | | 1.36 | |
| Per cent drier efficiency | 100.0 | | 60.0 | | 70.2 | | 87.8 | |

A study of this table will show what proportion of heat is doing useful work of changing water into vapor and what proportion is being expended to carry the extra burden, mostly radiation and ventilation losses. Case IV was inserted here to show what the performance of the installation under consideration would be if one were to neglect heating the ventilating air to room temperature; in other words if one were to neglect heat that is often not charged to drying. It is this fifth item of radiation and ventilation loss that is not entirely appreciated by some operators, and is the one item that lends itself most readily to economy measures.

One method of cutting the fifth item is to eliminate it entirely by installing a vacuum drier.

Another method is to use heat economizers to recover part of the heat ordinarily thrown away.

A third method, the topic of this discussion, is to take the driers as they stand, house them in as far as practical with properly insulated material so as to minimize radiation losses, and equip the housed drier with means to recirculate and control the heat and vapor so as to make maximum use of heat radiated or otherwise supplied to the drier. This will not only reduce the losses by reducing the radiation and the amount of air required for ventilation, but it will increase the capacity of the drier to such an extent as to make the investment a real asset. After the heat and air have thus done their full duty in the drier, additional economy can be obtained by the installation of economizers; the economizers will be more efficient and cost less, due to lesser air capacity.

Three installations of this nature have been put into operation within the past few months. Two are on board machines and one on a fourdrinier. The fourdrinier installation is on a machine making several specialties and has not been in operation long enough to permit obtaining most reliable data. However, a week's test when it was first put in operation showed an increase of drying capacity of about 12 per cent, the limit being reached when it was unsafe to run faster on account of construction of driving machinery. The steam pressure was about cut in half at the higher speed. Drying was uniform and very satisfactory.

Figs. 1, 2 and 3 show photographs of the two cylinder machines which have now been running since February 1. The housings were completed about January 1, but the system as a whole did not function until February 1.

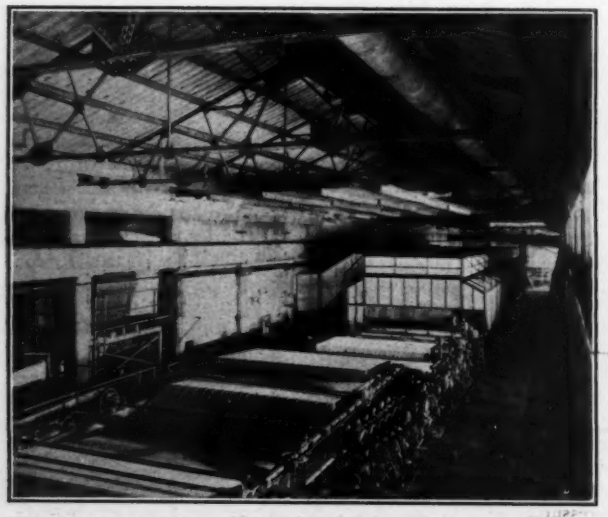

FIG. 1.
No. 1 Machine, Cornell Wood Products Co., Cornell, Wis. General view from wet end showing drying section and equipment. (Patents applied for.)

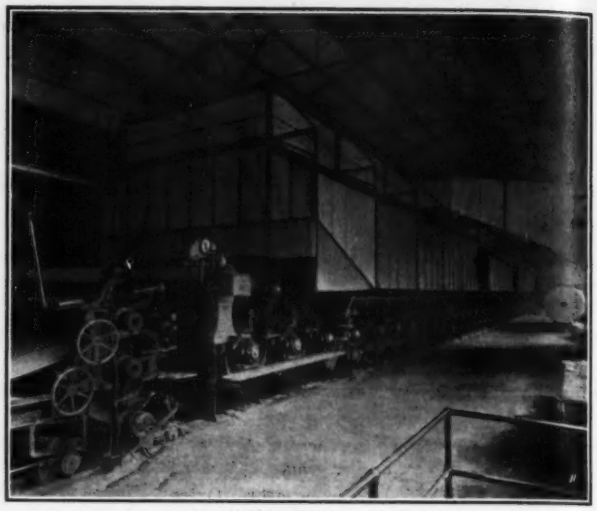

FIG. 2.
No. 2 Machine, Cornell Wood Products Co. Close-up view showing typical construction features. (Patents applied for.)

### Results of New Drier

Some results are rather intangible or hard to reduce to figures, but are worth mentioning. There has been reduction of rejects from the inspection department and more satisfactory operation

of the wall board department because of less dirt and more uniform and thorough drying; reduction in costs of belting and other drives in the mill and in the cost of lubrication; stoppage of deterioration of roof structure and the building in general which was formerly caused by condensation of vapor; improvement of morale and efficiency of operators; reduction of general maintenance of machinery such as motors, etc.

### Improvement of Room Conditions

While improvement of room conditions creates results that are difficult to evaluate, a picture of conditions attained will no doubt be interesting. Fig. 4 is a temperature chart showing dry-bulb and dew point temperatures and relative humidities at eight stations lengthwise of the machine room and at three elevations at each station. The readings at the lower elevations were taken about six feet in front of the machine while the roof temperatures were taken about over the center line of the machine.

Note that the outside dew point temperature was 21 degrees and the maximum inside dew point temperature was 57 degrees and this occurred over the drier in the warm region where we would naturally expect higher temperatures. The outside dry-bulb was 32 degrees and the maximum inside dry-bulb was 78 degrees; compare this with the usual temperatures of 110 or higher that are found in board mills at the roof. Roof heat losses are usually great, and the hotter the temperature inside, the greater the loss; it is more economical therefore to reduce the roof temperature. The relative humidities are well below 50 per cent except at the roof, where the maximum is 56 per cent. This could readily be reduced by increasing the temperature or the quantity of air supplied at the roof but that is not necessary unless the roof becomes wet.

It is evident from this chart that the room conditions were ideal.

### Reduction in Steam and Coal Consumption

Test data to appear later in this paper will bring out the effect on steam consumption as shown by the test. But since tests of rather short duration do not always tell the true story, Table 2 is given below showing the coal consumption of the entire plant per ton of product actually recorded. The writer does not take credit for the entire economy shown in this table for other steps were taken to reduce the fuel bill. However, since the engineer and management of the mill insist that the drier installation was largely responsible, and figures show it, the table is presented. It is interesting to note that hot weather economies are as great as those in cold weather. There is no appreciable difference in the heat value of the coal used now as compared to that used in 1927.

FIG. 3.

No. 2 Machine, Cornell Wood Products Co. Back of drier showing fans and ducts and top of housing. (Patents applied for.)

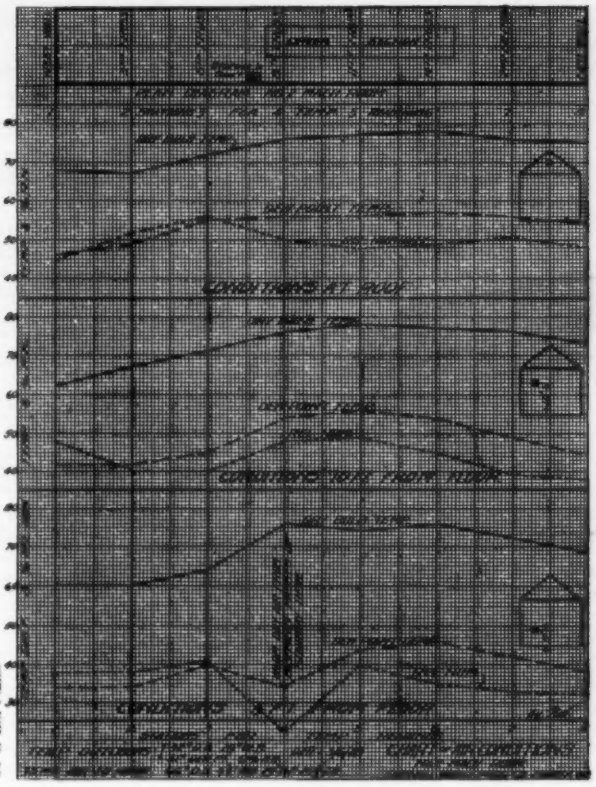

FIG. 4

TABLE 2

POUNDS OF COAL PER TON OF PAPER PRODUCED

| | Jan. *a* | Feb. | Mar. | Apr. | May | June | July |
|---|---|---|---|---|---|---|---|
| 1927 | 1660 | 1720 | 1640 | 1540 | 1450 | 1475 | 1405 |
| 1928 | 1527 | 1375 | 1390 | 1225 | 1090 | 1128 | 1050 |
| Reduction | 133 | 345 | 250 | 315 | 360 | 347 | 355 |
| Per cent | 8 | 20 | 15 3 | 20 5 | 24 8 | 23 5 | 25.3 |

*a* System not in full operation this month.

### Increase in Production and Drying Capacity

Increase in production is usually accompanied by an over-all increase in fuel and steam consumption; but the above table shows an over-all coal saving and the table below, Table 3, shows an increase in weighed tonnage.

Several things are to be specially noted in connection with the following table: 1st. On some grades of paper the former speeds were quite near the maximum allowable speed of the machine so it was not possible to obtain much increase in speed nor production in such cases; however, the increase in drying capacity is shown by the reduction in steam pressure for, obviously, if they permitted higher speeds they could be obtained by increasing the pressures. 2nd. In the fabrication of wall board it is desirable to get the board as dry as possible, so the backtenders on this machine would rather dry the paper drier than reduce the pressure.

TABLE 3
EFFECT ON PRODUCTION AND STEAM PRESSURES

| Product | Per cent increase in production | Per cent reduction in pressure | Remarks |
|---|---|---|---|
| Test liner | 8 | 56 (23 lb. to 10 lb.) | Limit of machine speed. |
| Bottle cap | 30 | None | 32 point. |
| Bottle cap | 19.6 | 25 (20 to 15) | 40 point. |
| Egg case | 9 | 12 (15 to 12) | |
| Super board | 15 | None | Wall board product. |
| Bulk board | 9 | " | " |
| Cornell board | 11 | " | " |
| Badger board | 13 | " | " |
| Solid WP. board | 13 | " | " 20 point. Limit of speed. |
| Solid WP. board | 25 | " | " 26 point. |

Another measure of drying capacity is: Water evaporated per unit of drier surface. This figure depends on several factors and may vary from time to time, but the following Table 4 may be of interest.

TABLE 4
POUNDS WATER EVAPORATED PER SQ. FT. OF DRIER SURFACE

| | No. 1 Machine | No. 2 Machine |
|---|---|---|
| Previous to installation | 1.41 | 1.35 |
| After installation | 1.73 | 1.79 |
| Increase in per cent | 23.0 (Lower pressure) | 32.5 (Pressure same) |

### Test of New Dryer Performance

Numerous tests were made on both machines over short periods and on various grades of paper. Some of these were made for the purpose of regulating the system and others to obtain as nearly accurate data as possible as to air quantities, moisture contents of sheet, etc. The following data were obtained from a 24 hour test during which the machine ran almost continuously without appreciable loss of drying time.

In all cases where heat units are transferred into steam units it has been assumed that steam is at 11 lb. ga. pressure and gives up only its latent heat of 950 B.t.u.s per pound.

In calculating evaporation per unit drier surface, the surface is figured by multiplying the circumference of one drier by the untrimmed width of sheet by the number of driers.

The unaccounted for production was almost entirely caused by losses at the reels and calenders, so it is assumed that the entire run was put over the drier rolls.

DATE OF TEST: Feb. 14, 1928.
DURATION: 24 hours.
MACHINE DATA:
Type: Cylinder.
Driers: 84 driers, 42" x 140", arranged in three decks.
Effective surface, as figured, 10,250 square feet.
PAPER:
Grade: 85 lb. test liner.
Weight: 67.5 pounds per 1,000 sq. ft. after calenders.
65.9 pounds per 1,000 sq. ft before calenders.
Speed: 197½ feet per min.
Width: 129¾ inches, trimmed.
133 inches, untrimmed.
Per cent trim to total: 2.44
Moisture content: 68.6% average at wet end.
4.3% average after drier and before calender.
6.6% average after calender.

PRODUCTION:

| | | |
|---|---|---|
| Calculated production per hour: | 8,660 | pounds at 4.3 per cent moisture. |
| Calculated production per hour: | 8,660 | pounds at 4.3 per cent moisture. |
| Calculated production per hour: | 8,870 | pounds at 6.6 per cent moisture. |
| Calculated production per day: | 106.4 | tons, untrimmed 6.6 per cent moist. |
| Calculated trim 2.44% per day: | 2.6 | tons. |
| Calculated net per day: | 103.8 | tons. |
| Actual weight per day: | 100.3 | tons. |
| Unaccounted for per day: | 3.5 | tons. |
| Unaccounted for per day: | 3.3 | per cent. |

EVAPORATION:

| | | |
|---|---|---|
| Water evaporated per pound paper dried at 4.3 per cent | 2.05 | pounds |
| Water evaporated per hour | 17,750 | pounds |
| Water evaporated per square foot drier surface | 1.73 | pounds |

STEAM:

| | | |
|---|---|---|
| Pressure (gauge) | 11 | pounds |
| Quality | 95 | per cent |
| Latent heat per pound | 950 | B.t.u. |
| Total steam to driers per hour | 23,600 | pounds |
| Total condensible steam per hour | 22,400 | pounds |
| Steam in driers per pound water evap | 1.267 | pounds |
| Steam to vento for air for dryer (per pound water evaporated) | .101 | pounds |
| Sum of drier and vento steam (per pound water evaporated) | 1.368 | pounds |
| Steam equiv. of heat in vent. air (per pound water evaporated) | .28 | pounds |
| Sum of all steam chargeable to drying (per pound water evaporated) | 1.648 | pounds |
| Total steam as shown by air test | 1.78 | pounds |
| Average of last two items | 1.71 | pounds |

AIR:

| | | |
|---|---|---|
| Outdoor conditions: | | |
| Temperatures in deg. F.: 13 dry bulb, 12 wet bulb, 9 dew pt. | | |
| Total heat per pound | 4.7 | B.t.u. |
| Total moisture per pound | 9 | grains |
| Exhaust conditions: | | |
| Temperatures: 125 dry bulb, 115 wet bulb, 113½ dew point. | | |
| Total heat per pound | 99.1 | B.t.u. |
| Total moisture per pound | 464 | grains |
| Relative humidity | 70 | per cent |
| Quantity of air per minute | 5,310 | pounds |
| Vento air applied at drier: | | |
| Temperature, dry bulb | 132 | |
| Quantity | 2,070 | pounds |
| Moisture represented by exhaust air: | | |
| Pick-up per pound of dry air | 455 | grains |
| Pick-up per hour | 20,700 | pounds |
| Calculated water from sheet | 17,750 | pounds |
| Difference | 2,950 | pounds |
| Difference | 16.6 | per cent |
| Note: This difference is accounted for by moisture given off at the wet end and other wet sources. | | |
| Heat represented by exhaust air: | | |
| Pick-up per pound | 94.4 | B.t.u. |
| Pick-up per minute | 501,000 | B.t.u. |
| Steam equivalent per hour | 31,620 | pounds |
| Steam per pound water evaporated | 1.78 | pounds |
| Heat required to heat vento air: | | |
| 2,070 pounds per min. from 74 to 132 deg. | 28,300 | B.t.u. |
| Equivalent steam per hour | 1,790 | pounds |
| Steam per pound water evaporated | 0.101 | pounds |
| Heat required to heat all air exhausted to room temperature of 74 degrees: | | |
| 5,310 pounds per min. from 13 to 74 deg. | 77,800 | B.t.u. |
| Equivalent steam per hour | 4,900 | pounds |
| Steam per pound of water evaporated | 0.28 | pounds |

### Dryer Efficiency

In order to furnish a basis of comparison with figures of steam consumption which do not include all ventilating requirements, there are three cases presented: Case I, based on all heat requirements. In this case the figure of 1.71 is used which is the average of the results obtained by the two methods. Case II, based on heat requirements for driers and vento air. Case III, based on heat given off from the drier rolls which represents the steam condensed in the driers.

CASE I: $\frac{1.2 \times 100}{1.71}$ ..... 70.2%

CASE II: $\frac{1.2 \times 100}{1.368}$ ..... 87.8%

CASE III: $\frac{1.2 \times 100}{1.267}$ ..... 94.7%

In conclusion, keen competition is forcing mill owners to make rigid economies in many phases of the industry. It is the writer's opinion, backed up by eight years' constant study of paper drying, by numerous installations of hoods and drying systems accompanied by many tests and observations, and finally by the last three installations mentioned in this discussion, that one big possibility for reducing conversion cost is overlooked or neglected in most mills; and this possibility lies in harnessing and controlling heat that is ordinarily wasted so that maximum work can be obtained from it. (Note: Patents applied for covering system involving principles described in this article.)

### Use of Paper Textiles Declining

The use of paper textiles in Germany has practically ceased, according to a report to the Department of Commerce from Assistant Trade Commissioner A. Douglas Cook, Berlin. During the war considerable quantities of woven goods were manufactured, using paper yarn for both warp and weft.

Paper and cellulose yarns are used only in a few cloth manufacturing industries at present. A number of carpet factories in the Gera district use paper yarns in limited wall decoration material and elastic band weaving mills use fine paper and cellulose yarns as a filling. It is also used in considerable quantities by the cable manufacturing industry for covering and filling cables. Other purchasers are the gold and silver spinning mills, the trimmings industry, and manufacturers of artificial flowers.

Thicker yarn spun from best untearable paper is sold as paper string. The wicker furniture industry uses quantities of firmly spun paper yarns in the manufacture of garden furniture.

According to the Association of Germany Paper Manufacturers there are only two mills manufacturing this class of paper yarns.

### G. E. Roberston & Co. Install Boiler

HINSDALE, N. H., September 24, 1928.—G. E. Robertson & Co., tissue paper manufacturers, have recently completed the addition to their power plant of a 250 hp. Dillon boiler, smoke stack and other equipment.

Section of the

# COST ASSOCIATION OF THE PAPER INDUSTRY

*Affiliated with*

THE AMERICAN PAPER AND PULP ASSOCIATION

Edited by
THOS. J. BURKE, C. A., Sec.-Treas.

# Valuation for Financial Statements*

## Bouldin S. Mothershead Proposes Introduction of New Book to be Known as "Valuation Ledger"—Business Men Entitled to Know Real Financial Condition

*It is a drastic step that Mr. Mothershead advocates in this article, prepared especially for "The American Accountant". Mr. Mothershead, B.B.A., C.P.A., is president of the Texas Society of Certified Public Accountants. He has been observing closely the trend of thought not only in accounting circles, but among business men as well, and this article is designed to be an up-to-date commentary on some of the problems of a technical nature with which the profession is confronted. His advocacy of the plan of adjusting asset values in a statement of financial condition —note he does not term it a balance sheet—really is a plea that the business man be given a complete picture of the financial standing, or true status of his business.*

*Influences are constantly at work, this writer points out, over which the business man has no control. These influences may not have been reflected in actual transactions, yet they affect the true financial condition of a business and should be shown in the report, Mr. Mothershead contends. He would set up a valuation ledger, to be handled as a private ledger, to show all assets and equities as of a given date at their actual values, with a control for the surplus account of the main system of accounts, and also an adjustment or reconciliation account to reflect the causes for the variance in the surplus as reflected by the two systems.*

*What if the surplus shown on the profit and loss statement does not coincide with the surplus shown in the valuation ledger? What of it? asks Mr. Mothershead. He thinks the business man will be glad to have the statement of financial condition showing the real value of his business, including increments, inventories at market price less cost of selling and profit, land and buildings at resale value, and so on.*

*As to good-will, this writer advocates showing it, if there is any with a measurable value. He describes how he would compute its value. The article is one calculated to cause serious thinking, and to bring to the editorial desk much comment.—The Editor.*

It seems that some new Columbus has proposed to sail around the world of accountancy and thus refute our pleasant theory that our world is flat. Even the leaders in accounting thought are greatly disturbed over the plausibility of this project, and are endeavoring to reconstruct our multiplex theory of accounting before it shall become a laughing matter.

Evidence of this disturbance is found in the address of Messrs. Montgomery and Hatfield at the annual meeting of the American Institute of Accounting last September, and in the articles of Messrs. Daines and Greer in recent issues of the "Certified Public Accountant."

The outstanding questions, however, are, "What will happen to the venturesome person who risks his neck on the other side of the world, if there is any otherside?" and "Who will be foolhardy enough to go around and find out?" And the discussion goes on until we run the danger of having some present-day wit paraphrase the famous remark that weather is a subject that everyone talks of, but nobody does anything about.

Just what led to this great tempest in the teapot? The accountancy profession has been obsessed for a number of years with the idea that the perfect theory has been evolved. The practical business man was laughed to scorn, if he ventured to suggest that his business was in better shape than was indicated by the statement prepared by his auditor. He was met with the withering comment, "Who are you, to have any conception of the principles of accountancy? This statement was prepared in accordance with the law of the Medes and Persians, which altereth not."

The cardinal principle of the law was that valuations must be determined by cost. Conservatism must be used, lest someone become optimistic. Unrealized profits must be avoided as the root of all evil.

And then came the crash of 1921. Values dropped below cost. Amid all his grief the business man had one pleasure—that of turning the laugh on the self-sufficient auditor.

"Now what are you going to do about your all-important cost? It is no longer conservative. You would not admit an unrealized profit. What about an unrealized loss?"

### Accountants Made a New Law

In consternation the accountants passed a new law, "Cost or market, whichever is lower!" And they soon found themselves in the condition of the mythical city which passed a new traffic ordinance that all north and south streets should be one way streets with traffic moving from north to south.

Let us get clear of the confusion, and analyze conditions. Just what is the purpose of accountancy? Is it to determine the profits of a given enterprise for a given period? Or is it to determine the financial condition of the enterprise at a given time? Have we not lost sight of the purpose of accountancy, in our glorying over the development of a perfect science? Have we not become enthused over the beautiful sym-

* The American Accountant

metry of the principle that the sum of all debits is equal to the sum of all credits, until we have forgotten the fact that the books should reflect facts as they exist?

### Have Set Up an Idol

We have set up an idol to this principle, known as "Balance Sheet," the very name of which indicates our rejoicing over the fact that we can make books balance. Would we not do well to reject this term "Balance Sheet," and use rather the meaningful expression "Statement of Financial Condition?"

We have become wrapped up in the theory that, if every transaction, as it occurs, is entered on the books with a proper expression of the debits and credits involved, the books must be accurate and reflect a true picture of the business. But we have overlooked the fact that influences may be at work over which the business man has no control, and which may not have been reflected in actual transactions. In fact, so loose has been our thinking that we have become confused over our very terminology. Even the meanings of basic words such as "profit" and "income" have become confused.

### "Profit" Defined

"Profit" is the result of the successful purpose of realizing gain. Two essential elements are involved. First, the business man entered into the transaction for the purpose of obtaining profit. Second, the transaction must have been completed before the profit existed. On the other hand, "income has a much wider meaning, unrestricted by these two elements. A gift to an individual is income but it is not profit. The gift of a kind providence in increasing the value of a tract of real estate might well be income without being profit, until after a sale has been made.

Let us come back to our question as to the purpose of accountancy, and review a bit of accounting history. It has been said that "single entry" is an antiquated method of bookkeeping that has been supplanted by "double entry." It is true that "double entry" is far more highly developed than "single entry." But we should consider the purpose of the two systems.

The primary purpose of "single entry" was to determine the financial condition of a given business at a given time. The primary purpose of "double entry" is to determine the profits of a given business for a given period. Since our present accounting theory has to do almost entirely with the "double entry" system, it has been developed with the purpose of the most accurate possible showing of profits. In this there can be no question but that success has been attained.

The theories relating to cost, depreciation, realized profits, and so on in great detail, are based on the purpose of finding out just how successful the business man has been, assuming that he has not been benefited by influences over which he has had no control, and considering only those transactions which are definitely closed. An accurate profit and loss statement is the primary course, and the so-called balance sheet is merely a by-product.

We have heretofore been satisfied with the theory that this balance sheet, this by-product of the profit and loss statement, was an accurate expression of the financial condition of a business at a given time. We have been misled by the theory that what a man had at the beginning of a period plus his profits during the period would be what he had at the end of the period. We have overlooked the fact that in reducing the expression of all assets and liabilities to a common denominator, dollars, the variance in value of both the dollars and the commodities must be considered in determining the financial condition at the end of the period.

In discarding the single entry method of accounting, it seems that we have lost sight of that purpose of books to show the financial condition of a given business at a given time. We have become enthusiastic over the great value of determining the profits for a given period by the double entry method, and have given little thought to the need for an accurate not a so-called conservative, showing of the financial condition on a given date, as was readily obtainable by the single entry method.

EXHIBIT A—SUGGESTED FORM OF STATEMENT OF FINANCIAL CONDITION

XYZ CORPORATION

Dec. 31, 1927

| ASSETS | | EQUITIES | |
|---|---|---|---|
| Cash on hand and in banks. (Available for immediate use, without discount) | $10,000.00 | Current liabilities ..... (Amount required for immediate liquidation) | $40,000.00 |
| Accts. & notes receivable. (At face or book value less allowance for losses and collection costs) | 30,000.00 | Mortgage bonds ..... (Amount required to call at this date) | 50,000.00 |
| Inventories ..... (At market price less xx% allowed for selling cost and profit) | 50,000.00 | Contingent reserves ..... (Reasonable amounts required to meet probable demands for contingent liabilities and losses) | 10,000.00 |
| Investments ..... (At current market prices) | 20,000.00 | Capital stock ..... (Market value, with correction for temporary market conditions) | 120,000.00 |
| Land and buildings..... (At resale value) | 60,000.00 | Paid in capital....$80,000 | |
| Machinery & equipment.. (At replacement cost less allowance for depreciation and obsolescence) | 30,000.00 | Surplus from operations .....-10,000 | |
| Good-will ..... (Computed as shown in Exhibit B) | 20,000.00 | Surplus from revaluation of assets.. 30,000 | |
| | | $120,000 | |
| | $220,000.00 | | $220,000.00 |

The double entry method was guaranteed to tell a man how much he had made, how much he was worth, and to cure all ills including fat-headedness. And the result has been that the business man has put us in the same category with bald-headed scalp specialists.

Should we not recognize the fact that there are two separate and unrelated purposes involved in accountancy, and that two distinct methods are required for the accomplishment of these purposes? We should recognize that single entry and double entry are each parts of a well-balanced whole. Each should be used for its specific purpose; double entry to determine the profits for a given period, single entry to determine the financial condition at given date.

### Can Hear Storm of Protest

I can hear a storm of protest arising from the mechanical-minded accountants, objections to the use of two sets of books for two different purposes. "And besides," they will say, "that sort of thing will upset the vital principle that the variation of the surplus account in the balance sheets of two dates must exactly agree with the result of the profit and loss statement for the intervening period. "Yes, they would adhere to a theory even though it leads them to deny very obvious facts.

To the mechanical-minded I would suggest the following: that the existing double entry system be retained in its entirety, but that it be recognized for what it is—a method for determining profit or loss; that a new book be introduced, perhaps known as the "valuation ledger," in which all assets and equities be shown as of a given date at their actual values rather than as an expression of costs; that such new book be handled as a private ledger, containing a control for the surplus account of the main system, and also an adjustment or reconciliation account to reflect the cause or causes for the variance in the surplus as reflected by the two systems.

### Valuation Ledger Would Show Financial Condition

The profit and loss statement would be prepared from the double entry system which records closed transactions only. The statement of financial condition would be prepared from the "valuation ledger." Exhibit "A" illustrates the form this statement of financial condition should take.

I shall not attempt any extended discussion of the theory of valuation of assets. In fact, I know very little about it, and

I am inclined to believe that very few other accountants know much about it. Just recently in testifying in a lawsuit I was asked whether certain figures were a correct statement of the values of certain properties, and the objection was raised and sustained that I was an accountant and was not expected to know what the actual values were, only the book values.

Perhaps we accountants have much to learn about valuations. Perhaps it would not be amiss to dig up our text-books on economics and find out what value really is and how it is determined. Certain it is, however, that valuation is a thing of the present and future and not a thing of the past. Value depends on potentialities and possibilities, on what can be done and what may be done, but does not depend on what has happened in the past, and particularly not on what an asset may have cost, except in so far as cost may have influenced supply.

XYZ CORPORATION
EXHIBIT B—PROCEDURE OF COMPUTING VALUE OF GOOD-WILL

Computation of Good-Will, December 31, 1927

| Year | Adjusted profits | Factor | |
|---|---|---|---|
| 1927 | $14,000.00 | 4 | $56,000.00 |
| 1926 | 12,000.00 | 3 | 36,000.00 |
| 1925 | 10,000.00 | 2 | 20,000.00 |
| 1924 | 8,000.00 | 1 | 8,000.00 |
| Net earnings capitalized on 10 year basis | | | $120,000.00 |
| Less net tangible assets | | | 100,000.00 |
| Good-will | | | $20,000.00 |

I cannot refrain from commenting on that bug-a-boo extraordinary of accountancy—good-will. We become actually hysterical when it is mentioned. Only when it becomes a question of showing it on the books or having them out of balance, will we let it appear. Only when the business man has bought it and paid out hard cash for it, will we show it on a statement, and then we show it for just what it costs, no more, no less. No, we will not show it on the statement of the man who creates it. Our argument seems to be that there is no such thing as good-will until the man who created it has sold it to someone else. At least we follow that theory in our formal statement of the facts contributing to the financial condition.

* American Institute of Accountants.

**Value of Good-Will**

Until we overcome our fear, which we call conservatism, and handle good-will in a logical manner, we will be forced to admit our incompetence to give logical consideration to the valuation of any assets. We should be entirely willing to show good-will on a statement of financial condition when it exists, whether it has been paid for as such or not. We should consistently refuse to show a non-existent good will, regardless of what has been paid out in an attempt to acquire it. If we take this attitude, we can get away from the dilemma expressed by Couchman, "If you can write it down, you need not; if you can not, you should!"

Until we have created general confidence in our ability to value good-will, we should invariably show how we arrived at the good-will figure. Exhibit "B" is offered as an example of this showing. In it the weighted-average profit, or "4-3-2-1" method, is used. This method recognizes the fact that of the four last prior years the last is the most important, and the others decreasingly important as you go back. It is perhaps needless to say, that non-recurring profits or losses should be eliminated and other disturbing factors taken into consideration before the computation is made.

In conclusion I would say, that we should be proud of our present theory of accountancy; at least in so far as it has not been compromised in an effort to make it do things for which it is in no way designed. We should continue to use it in all of its excellence, improving it, if possible, for the purpose for which it is intended—determination of the profits for a given period.

But when we come to the preparation of a statement of the financial condition of a business on a given date, let us quit using just what is left over after preparing the profit or loss statement, and with pride calling it a balance sheet. Let's prepare a true statement of the financial condition of the business—thoroughly explain, of course, the cause or causes for the variation in the surplus account—but refuse to let any mechanical difficulty deter us from setting forth the assets at their actual value and the liabilities as they exist.

# Uniform Reports for Credit Purposes*

The Florida Institute of Accountants has drawn up a statement describing the form and content of accountants' reports for credit purposes and treatment of certain items in them. This tentative draft of suggested procedure was submitted to credit officers of a number of Florida banks and was approved by them.

The memorandum is not necessarily in its final form, but it has been decided to send a copy of it to every accountant in the state to show the kind of work in which the Florida Institute is engaging.

The text of the drafted proposals is as follows:

**Florida Institute of Accountants**

The following preliminary suggestions regarding accountants' reports have been agreed upon by credit managers of a number of the largest banks in Florida and committees of accountants. While they are not obligatory upon members of the Florida Institute, it is hoped that they will meet with general acceptance, for it is believed that their adoption will result in benefit to the bankers, to accountants and to their clients.

1—As to Form

1—Members of the institute should invariably render their reports in the recognized form, including statements and comments, enclosed in a cover, and bankers should ask for such complete reports and, so far as possible, decline to accept copies of the balance-sheet or any other statements detached from the comments.

2—Members will adopt the uniform size of 8½ x 11 inches for all reports, as soon as present supplies are consumed.

2—As to Contents

1—Members will include a short description of the scope of the examination, apart from, and in addition to, the regular comments.

2—Members will always give, when possible, an analysis of the surplus accounts which may be compared and reconciled with the figures down in previous reports.

3—Reports are always to be accompanied by a profit-and-loss account.

3—As to Certificates

1—That members will invariably attach on the balance-sheet, or in the comments, or letter of transmittal, a certificate indicating any reference to the accompanying comments which may be necessary.

The bankers prefer that this certificate contain an expression of the accountant's opinion as to the correctness of the statement and the absence of such an expression will be taken as an indication that the accountant assumes no responsibility.

2—The following form is suggested as a model:

We have prepared the accompanying balance-sheet of the ..... Company after verifying the items shown therein in the manner, and to the extent, described in the accompanying report, of which this balance-sheet is a part, and, subject to the explanations therein, in our opinion, it sets forth fairly and fully the condition of the said company on the said date.

* American Institute of Accountants.

4—As to Assets

1—Assets. In the case of notes or accounts receivable, for which a reserve is set up, and of capital assets, such as building and equipment of all kinds, the balance-sheet should show the total debit appearing on the ledger, and the amount set up as a reserve for bad debts or for depreciation should also be shown and deducted therefrom, carrying the net amount to the total column.

Each class of equipment should be shown separately on the balance-sheet or in an accompanying schedule.

2—Receivables. When reporting accounts receivable it is advisable and convenient to "age" them and to state in the comments the percentage of each class, e.g.,

Under 30 days.....40%
Under 90 days.....20%
Under 6 months.....15%
Over 6 months.....25%

3—Where interest has been included in the amount shown for any asset and credited to a reserve account instead of to profit and loss, the amount of this reserve should be deducted from the asset, rather than added on the liability side.

4—Accounts receivable should include only trade accounts; all other receivables such as amounts due from officers and employees should be shown separately.

5—In stating fixed assets, members should always endeavor to show the following items separately and at cost:

Land
Buildings
Equipment

deducting from each depreciable item the amount of depreciation reserve.

6—Inventories are preferred at cost or market whichever is the lower.

If not taken as in former years, comments on any changes between the two bases, showing which is taken on the balance-sheet should be made. State whether or not all goods have been paid for or are included in payables.

5—As to Liabilities

1—*Liabilities*—The credit side of the balance-sheet should be divided into three parts:

Liabilities
Reserves
Net Worth

2—Liabilities should be divided into "current" and "deferred." The former should include all liabilities such as bonds, mortgages, notes or accounts falling due within one year from the date of the balance-sheet.

3—The items "accounts payable" and "notes payable" should always show if they are "trade" accounts or are due to officers, stockholders or employees; items of the latter class should be shown separately. The purpose leading to the liability should always be indicated.

4—The maturity dates of notes payable and interest should be furnished.

5—Accrued taxes and accrued interest should be included in current liabilities.

6—Taxes. Always show the years included in liabilities, distinguishing between federal and other taxes.

6—As to Reserves

1—Reserves for unrealized profits should be shown in a total by themselves, after all liabilities and just ahead of the net worth.

2—Where interest has been included in the amount shown for any asset, and a reserve set up therefor, the amount of this reserve shall be deducted from the asset, rather than shown on the liability side. (See paragraph 3 under assets.)

7—As to Capital Stock

1—Capital stock. There should always be shown the following three items:

Capital stock Issued $.....
(Authorized $.....)
Less treasury stock $.....

Outstanding $.....

A separate statement should be made for each class of stock where more than one exists.

8—As to Profit-and-Loss Statement

1—Reports should always be accompanied by a profit-and-loss account.

2—Explain the method of writing off bad debts, i.e., through a reserve or direct.

3—When making quarterly examinations, the profit for each quarter should be reconciled with the total profit for the year, and an analysis of the increase or decrease in surplus during these periods should be furnished; also separately classify surplus realized from operations outside the regular scope of operations.

9—As to Contingent Liabilities

1—Contingent liabilities. Every *balance-sheet* should carry a footnote stating that the accountant has looked for contingent liabilities and has not found any (or finds such liabilities amounting to $....., as the case may be).

10—General

1—The minutes should be examined for the purpose of ascertaining that transactions which require the approval of directors or stockholders have been properly authorized and that no transactions affecting the financial position of the company have been omitted from the books of account.

2—The accountant should ascertain what purpose the report is to serve, and, if for credit purposes, explain to the client the desirability of obtaining just such information as the bankers desire. He should communicate with the bankers, if necessary, to obtain the client's permission to secure the desired information.

## Ohio Valley Shippers' Association Meets

[FROM OUR REGULAR CORRESPONDENT]

Dayton, Ohio, September 24, 1928.—Dayton's delegation to the meeting of the Ohio Valley Shippers' Association at Louisville, Ky., the past week was large and representative. Those from the paper mills and allied concerns were led by T. T. Webster, of the G. H. Mead Company of this city. A number of Miami Valley companies were represented. Mr. Webster was an officer of the National Association and of the Miami Valley body.

Maurice T. Otto, traffic manager of the Dayton Chamber of Commerce, led the general delegation. As chairman of the Chamber of Commerce committee, he submitted a report on business conditions, furnishing facts which will prove of value to the trade in general. Committee reports from 24 commodity committee chairmen were given at the meeting, thus furnishing a practical forecast of business to be expected during the remaining months of the year.

Guy L. Cory of the neighboring city of Springfield, Ohio, and manager of the Springfield Traffic Association, is general chairman of the advisory board, and presided at the meeting which was attended by approximately 2,300 members. F. D. Sampson, of Louisville, delivered the principal address at the banquet which was held Tuesday night.

## Swedish Pulp By-Products

Attempts are being continued to utilize the waste products of the Swedish wood pulp industry, according to the Department of Commerce. Motor alcohol is considered one of the most important by-products, and much work has been devoted to its introduction in the market as fuel for automobiles. It is at present sold in the form of "light benthyl," a mixture of 25 per cent motor alcohol and 75 per cent gasoline. The price is kept at the same level as that of gasoline, and many swedish motorists prefer the "light benthyl" to pure gasoline.

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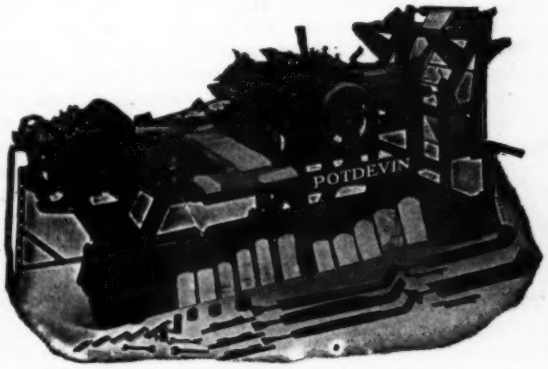


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# Naval Stores Research in Bureau of Chemistry

By F. P. Veitch, in Charge of Naval Stores Research,
U. S. Department of Agriculture

The research work on naval stores of the Industrial-Farm Products Division of the Chemical and Technological Unit of the Bureau of Chemistry and Soils of the United States Department of Agriculture begins with the turpentine gum in the cup as it exudes from the tree, and follows it through to the final utilization in industry of the products obtained therefrom.

It thus covers the handling of the crude gum to the still, the distillation of the gum into turpentine and rosin, the proper packaging and handling of the products, and finally the study of the composition, properties and uses of these products with a view to their better adaptation to their various uses. The whole of the work has as its object the more profitable production of better turpentine and rosin, primarily for the benefit of the producer but also largely for the benefit of the users of turpentine and rosin.

### Three Broad Lines

The research work naturally divides itself into three broad lines. First, full-scale still operation for the purpose of developing the best methods of handling and clarifying the crude gum, preventng losses in turpentine and rosin, securing the highest grades of turpentine and rosin, and packing to insure safe transportation. Second, the study of conditions at individual stills and the adaptation of better methods and processes to fit the needs and requirements of each still. And, third, research at headquarters in Washington on the composition of turpentine and rosin, and the study of difficulties arising in their utilization, with special reference to the eliminaton of such difficulties to make these articles more suitable for the purposes for which they are customarily used. And, finally, the study of adaptability of turpentine and rosin to new uses.

### A Well Rounded Organization

These three phases of the naval stores work give a well-rounded organization for the handling of naval stores problems, with the naval stores experiment station which it is proposed to establish in cooperation with the Forest Service at some central location in the producing belt, the office of naval stores technology with headquarters in Savannah, Georgia, and the administrative and research work on composition and uses located at the Department of Agriculture in Washington.

### Real Program Made

Real progress has been made especially in the technological work. Many individual stills have been visited, methods and procedures have been greatly improved, with resulting material profit to the producers. A number of minor difficulties in the use of turpentine and rosin have been studied and methods for their prevention or correction have been worked out. The larger problems, of which there are many, especially work on straining, whereby, as indicated by the laboratory work so far done, one or two grades better rosin will be made, must await the opening of the Naval Stores Experiment Station, for their solution. The laboratory work which has been done points the way to the successful solution of these problems.

## Swing Hammer Pulverizers

Showing how widely applicable is the swing hammer principle of reduction, the Jeffrey Manufacturing Company, of Columbus, Ohio, has recently published, in thirty-two pages, their Catalog No. 450.

This catalog lists fifty-four basic materials, differing widely in consistency, size and weight, all of which may be successfully reduced by Jeffrey swing hammer pulverizers.

The manufacturer who is seeking new methods of reduction can find at least one item in this list that will resemble his own product and thus enable him to judge whether or not swing hammer pulverizers will solve his particular problem. The broad range of the examples given is shown by these few picked at random: asphalt, clay, coal, glass, glue stock, limestone, spices, tobacco stems, straw and oil cake. These comprise hard and soft, light and heavy, sticky and non-sticky, abrasive and non-abrasive materials.

This list is the result of actual successful practice, and other items are being added every day as industry turns to new methods.

Distinctive from the many specialized forms of the Jeffrey swing hammer pulverizer are the Type A and the Type B which form the two general groups. The Type A is a general purpose machine suitable for reducing dry rock products and many friable materials to the degree of fineness required for many purposes. The material is fed into the path of rapidly revolving hammers. The partially reduced material immediately passes over the cage of screen bars. The oversize is carried around the machine for a second operation. Six sizes are listed and tables are given showing capacities for the materials most commonly used.

In the Type B, the illustrations show how the material is fed directly on top of the hammers, so that much of the reduction takes place in suspension.

The Type B, of extra heavy construction, is specified for the unusually severe jobs. The tables give eight sizes, and the capacities for limestone, coal, burnt lime and gypsum.

The largest Type B shown is the Jeffrey Armorplate, 54 x 48 inches, for reducing steam shovel limestone to 1 inch and finer in one operation. The machine does the work of both a primary and secondary crusher.

Two interesting special adaptations of Jeffrey pulverizers described in this catalog are the Limepulver and the Coal Sampler. The Limepulver combines a jaw crusher, swing hammer pulverizer, bucket elevator and a spout, the whole mounted on wheels. It is the only machine built which performs the double purpose of crushing one-man size limestone and pulverizing all of it to the proper size for soil treatment. The laboratory Coal Sampler is shown with sampling chute which delivers but one-sixteenth of the product received, this one-sixteenth, however, being a true sample of the whole mass.

A copy of this pulverizer catalog No. 450 may be had by writing the Jeffrey Manufacturing Company.

## Mr. Hawley Talks With Father in Germany

PORTLAND, Ore., September 21, 1928.—Willard P. Hawley, Jr., vice-president of the Hawley Pulp and Paper Company at Oregon City, had the honor of putting through the longest telephone message that was ever sent out of Oregon. On September 7 he called up his father, Willard P. Hawley, Sr., who on that day was in Bad-Nauheim, near Frankfort-on-the-Main, Germany, a distance of 7,000 miles.

Mr. Hawley, Jr.'s, voice was carried to New York by wire and then broadcast from Rocky Point, N. Y., to Cupar, Scotland. Here it was again picked up by wire and carried through to Germany. Mr. Hawley, Sr.'s voice was carried to London by wire and radioed from Rugby, England, to Hulton, Me., and then by wire to New York and through to the offices of the Hawley Company in Oregon City.

It was said that the voices of both father and son came in as distinctly at each destination as if the conversation had been in the home city.

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Jessup & Moore Paper Co., Phila., four orders, total .....4750 H.P.
Ontario Paper Co., Ltd.
For Daily Newspaper Co., North Tonawanda, N. Y. .....2034 H.P.
Filer Fibre Company, Filer City, Mich. .....1500 H.P.
John Lang Paper Co., Philadelphia, Pa..... 416 H.P.
Bayless Manufacturing Corp., Austin, Pa.....1300 H.P.
Northern Board & Paper Co., San Francisco, Cal., two orders, total ..... 400 H.P.
Crown Willamette Paper Co., San Francisco, Cal., two orders, total ..... 750 H.P.
Delaware Hard Fibre Co., Wilmington, Del., two orders, total ..... 920 H.P.
Kieckhefer Container Co., Delair, N. J. .....1800 H.P.

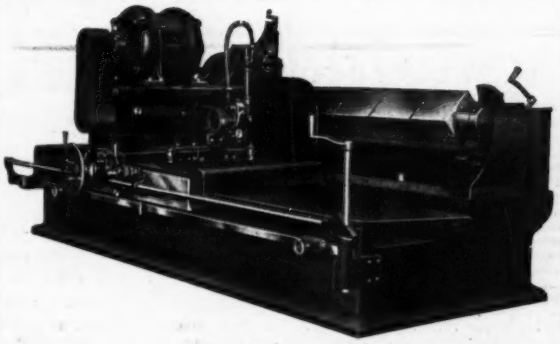
***Badenhausen Corporation***

Reg. U. S. Pat. Off.
GENERAL OFFICE, 1011 CHESTNUT ST.
PHILADELPHIA, PA., U. S. A.

120 Broadway, New York — 211 Tramway Bldg., Denver
Reibold Bldg., Dayton, O. — 513 House Bldg., Pittsburgh
1019 Guardian Life Bldg., St. Paul



## Wide Use of New Type Grinders



Within a comparatively short time, safely indicates outstanding value in paper knife grinding service. The dependability of the traveling wheel grinders for satisfying accuracy removes all fear of a poor job. When one of these grinders is installed all knife troubles are over and knife upkeep is reduced to a minimum, both of expense and labor. With minimum care in the most perfunctory routine service with one of these grinders, the knives are always in perfect condition.

COVELL-HANCHETT CO.
Big Rapids, Michigan, U. S. A.
514 First Ave., South,
Seattle, Wash.



# West Virginia Pulp and Paper Company

*Manufacturers of*

SUPERCALENDERED
and
MACHINE FINISHED BOOK
and LITHOGRAPHIC
PAPERS

Offset, Envelope, Bond, Writing, Cover and Music Paper, High Grade Coated Book, Index Bristol, Post Card, Kraft and Label Papers.

*also*

**Bleached Spruce Sulphite and Soda, Kraft Pulp**

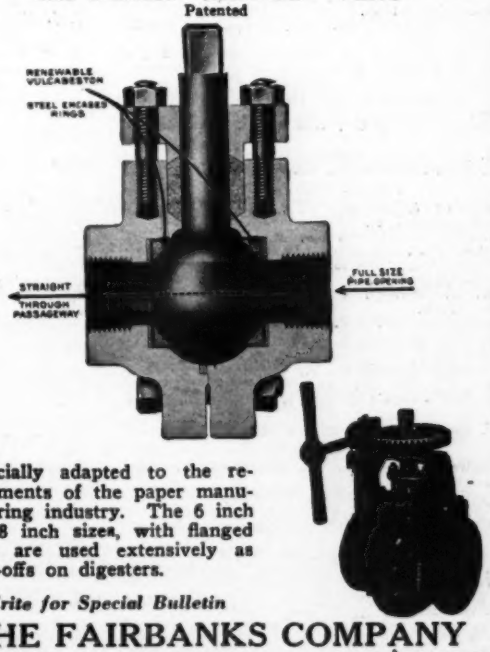
200 Fifth Avenue, New York — 732 Sherman Street, Chicago
503 Market St., San Francisco, Cal.
122 East 7th St., Los Angeles, Cal.
Sixth and Chestnut Sts., Philadelphia, Pa.



## FAIRBANKS' *"SPHERO"*

**The Perfect "Blow-Off" Valve**

Patented




Especially adapted to the requirements of the paper manufacturing industry. The 6 inch and 8 inch sizes, with flanged ends, are used extensively as blow-offs on digesters.

*Write for Special Bulletin*

**THE FAIRBANKS COMPANY**

BOSTON NEW YORK PITTSBURGH
Factory: Binghamton, N. Y.
*Distribution in ALL Principal Cities*

# Imports of Paper and Paper Stock

## NEW YORK, BOSTON, PHILADELPHIA AND OTHER PORTS

## NEW YORK IMPORTS

WEEK ENDING SEPTEMBER 22, 1928

### SUMMARY

Cigarette paper .....631 cs.
Wall paper .....18 bls., 2 cs.
Paper hangings .....12 bls., 24 cs.
News print .....1,464 rolls
Printing paper .....139 bls., 254 cs.
Printed paper .....32 cs.
Wrapping paper .....39 bls., 61 cs.
Packing paper .....34 cs.
Stencil paper and ink.....39 cs.
Greaseproof paper .....10 cs.
Filter paper .....49 bls., 94 cs.
Drawing paper .....5 cs.
Surface coated paper .....126 cs.
Baryta coated paper .....50 cs.
Gold coated paper.....6 cs.
Metal paper .....1 cs.
Coated paper .....13 cs.
Photo paper .....2 cs.
Decalcomania paper .....40 cs.
Writing paper .....64 cs.
Writing paper and envelopes .....4 bls., 4 cs.
Glass paper .....5 cs.
Silk paper .....5 cs.
Tissue paper .....61 cs.
Cover paper .....5 cs.
Colored paper .....22 cs.
Basic paper .....15 cs.
Straw board .....700 rolls
Straw paper .....20 bls.
Miscellaneous paper...1,335 rolls, 400 bls., 332 cs.

### CIGARETTE PAPER

British American Tobacco Co., Berengaria, Southampton, 64 cs.
British American Tobacco Co., Olympic, Southampton, 50 cs.
P. J. Schweitzer, Pres. Garfield, Marseilles, 102 cs.
P. J. Schweitzer, Paris, Havre, 7 cs.
M. Spiegel & Son, Pipestone County, Bordeaux, 8 cs.
American Tobacco Co., Pipestone County, Bordeaux, 400 cs.

### WALL PAPER

Titan Shipping Co., Berengaria, Southampton, 1 cs.
Hudson Forwarding & Shipping Co., Berengaria, Southampton, 1 cs.
A. C. Dodman, Jr., Inc., Berengaria, Southampton, 2 bls.
F. J. Emmerich, Deutschland, Hamburg, 2 bls.
D. C. Andrews & Co., Deutschland, Hamburg, 2 bls.
J. E. Bernard & Co., Deutschland, Hamburg, 2 bls.
Globe Shipping Co., Deutschland, Hamburg, 8 bls.
F. J. Emmerich, Cedric, Liverpool, 3 bls.
S. Stern Stiner & Co., Reliance, Hamburg, 1 ble.

### PAPER HANGINGS

Whiting & Patterson Co., Inc., Berengaria, Southampton, 7 cs.
Whiting & Patterson Co., Inc., Olympic, Southampton, 7 cs.
Whiting & Patterson Co., Inc., Mauretania, Southampton, 7 cs.
W. H. S. Lloyd & Co., Minnetonka, London, 3 cs., 12 bls.

### NEWS PRINT

Parsons & Whittemore, Inc., Berlin, Bremen, 1,246 rolls.
Perkins Goodwin & Co., Berlin, Bremen, 105 rolls.
Perkins Goodwin & Co., Westphalia, Hamburg, 49 rolls.
F. Henjes, Jr., Westphalia, Hamburg, 64 rolls.

### PRINTING PAPER

Bertram Blake Paper Co., Minnetonka, London, 5 cs.
F. C. Strype, Volendam, Rotterdam, 2 cs.
E. Dietzgen & Co., Volendam, Rotterdam, 7 cs.
Walker, Goulard, Plehn Co., Stuttgart, Bremen, 153 cs.
Lincoln Paper Co., Stuttgart, Bremen, 78 cs.
J. Henschel & Co., Westphalia, Hamburg, 5 cs.
National City Bank, Westphalia, Hamburg, 139 bls.
J. Henschel & Co., Reliance, Hamburg, 4 cs.

### PRINTED PAPER

Judson Freight Forwarding Co., Arabic, Antwerp, 32 cs.

### WRAPPING PAPER

J. E. Bernard & Co., Berengaria, Southampton, 1 cs.
J. Beckhard & Co., Stuttgart, Bremen, 47 cs.
T. Barrett & Son, Drottningholm, Gothenburg, 28 bls.
Birn & Wachenheim, Arabic, Antwerp, 12 cs., 11 bls.
J. Beckhard & Co., Berlin, Bremen, 1 cs.

### PACKING PAPER

Haule Wax Paper Manfg. Co., Reliance, Hamburg, 34 cs.

### STENCIL PAPER AND INK

Arlac Dry Stencil Co., Deutschland, Hamburg, 39 cs.

### GREASEPROOF PAPER

Central Union Trust Co., Reliance, Hamburg, 10 cs.

### FILTER PAPER

C. Schleicher Schull Co., Volendam, Rotterdam, 16 cs.
H. Reeve Angel & Co., Inc., Lancastria, London, 13 cs.
A. Giese & Son, Westphalia, Hamburg, 2 cs.
H. Reeve Angel & Co., Inc., Olympic, Southampton, 8 cs., 49 bls.
E. Fougera & Co., Olympic, Southampton, 52 cs.
Taiyo Trading Co., Kako Maru, Nagoya, 3 cs.

### DRAWING PAPER

P. Puttmann, Arabic, Antwerp, 5 cs.

### SURFACE COATED PAPER

Globe Shipping Co., Volendam, Rotterdam, 9 cs.
Quality Art Novelty Co., Deutschland, Hamburg, 7 cs.
Whiting & Patterson Co., Inc., Deutschland, Hamburg, 15 cs.
P. C. Zuhlke, Arabic, Antwerp, 65 cs.
P. Puttmann, Arabic, Antwerp, 1 cs.
Gevaert Co. of America, Arabic, Antwerp, 29 cs.

### BARYTA COATED PAPER

Globe Shipping Co., Stuttgart, Bremen, 30 cs.
J. H. Schroeder Banking Corp., Stuttgart, Bremen, 20 cs.

### GOLD COATED PAPER

F. Murray Hill, Berlin, Bremen, 6 cs.

### METAL PAPER

Overton & Co., Deutschland, Hamburg, 1 cs.

### COATED PAPER

Globe Shipping Co., Deutschland, Hamburg, 13 cs.

### PHOTO PAPER

J. J. Gavin, Franconia, Liverpool, 2 cs.

### DECALCOMANIA PAPER

B. F. Drakenfeld & Co., Franconia, Liverpool, 20 cs. (duplex).
L. A. Consmiller, Reliance, Hamburg, 10 cs.
C. W. Sellers, Reliance, Hamburg, 10 cs.

### WRITING PAPER

J. E. Bernard & Co., Berengaria, Southampton, 2 cs.
Guaranty Trust Co., Berengaria, Southampton, 1 cs.
Stern Bros., Berengaria, Southampton, 2 cs.
C. A. Redden, Berengaria, Southampton, 2 cs.
F. L. Kramer & Co., Minnetonka, London, 3 cs.
The Eleto Co., Deutschland, Hamburg, 10 cs.
J. E. Bernard & Co., Olympic, Southampton, 18 cs.
C. Bruning, Patria, Marseilles, 25 cs.
B. Altman & Co., Mauretania, Southampton, 1 cs.

### WRITING PAPER AND ENVELOPES

A. Goodman & Co., Deutschland, Hamburg, 3 cs.
Stone & Downer, Lancastria, London, 4 bls., 1 cs.

### GLASS PAPER

H. Pollak, Inc., Minnetonka, London, 3 cs.
Thomas & Pierson, Minnetonka, London, 2 cs.

### SILK PAPER

Whiting & Patterson Co., Inc., Volendam, Rotterdam, 5 cs.

### TISSUE PAPER

Meadows, Wye & Co., Franconia, Liverpool, 1 cs.
Old Master Paper & Pulp Co., Deutschland, Hamburg, 60 cs.

### COVER PAPER

International Forwarding Co., Deutschland, Hamburg, 5 cs.

### COLORED PAPER

Borden Riley Paper Co., Arabic, Antwerp, 2 cs.
A. Hartung & Co., Berlin, Bremen, 4 cs.
P. H. Petry & Co., Berlin, Bremen, 3 cs.
S. Gilbert, Berlin, Bremen, 13 cs.

### BASIC PAPER

American Express Co., Arabic, Antwerp, 15 cs.

### STRAW BOARD

Grand Corrugated Paper Co., Volendam, Rotterdam, 220 rolls.
Hygrade Eagle Corrugated Paper Prod. Co., Inc., Volendam, Rotterdam, 104 rolls.
Haas Bros., Volendam, Rotterdam, 114 rolls.
Perkins Goodwin & Co., Veendam, Rotterdam, 262 rolls.

### STRAW PAPER

American Express Co., Vancouver Maru, Hamburg, 20 bls.

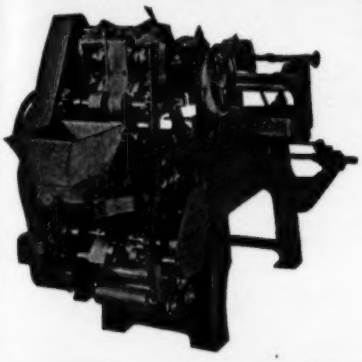
### MISCELLANEOUS PAPER

Japan Paper Co., C. Biancamano, Genoa, 1 cs.
T. F. Wilmot, Berengaria, Southampton, 1 cs.
Steiner Paper Corp., Volendam, Rotterdam, 33 cs.
International Forwarding Co., Volendam, Rotterdam, 17 cs.
Globe Shipping Co., Volendam, Rotterdam, 41 cs.
P. C. Zuhlke, Volendam, Rotterdam, 6 cs.
Tamm & Co., Deutschland, Hamburg, 5 cs.
D. S. Walton & Co., Drottningholm, Gothenburg, 412 rolls, 34 bls.
Penna. R. R. Co., Paris, Havre, 3 cs.
A. L. Diament & Co., Paris, Havre, 5 cs.
Standard Products Corp., Paris, Havre, 55 cs.
Guibout freres, Paris, Havre, 3 cs.
Japan Paper Co., Paris, Havre, 7 cs.
A. Goodman & Co., Paris, Havre, 6 cs.
Keller Dorian Paper Co., Paris, Havre, 33 cs.
Japan Paper Co., Mauretania, Southampton, 4 cs.
Arkell Safety Bag Co., Minnequa, Gothenburg, 647 rolls.
Union Paper & Twine Co., Minnequa, Gothenburg, 107 bls., 125 rolls.
The Borregaard Co., Inc., Minnequa, Gothenburg, 170 bls.
S. E. & M. Vernon, Minnequa, Gothenburg, 80 bls.
Crepe Kraft Co., Minnequa, Gothenburg, 9 bls., 92 rolls.
Wilkinson Bros. & Co., Inc., Minnequa, Gothenburg, 59 rolls.
Steiner Paper Corp., Veendam, Rotterdam, 42 cs.
Globe Shipping Co., Veendam, Rotterdam, 70 cs.

### RAGS, BAGGINGS, ETC.

National City Bank, Minnetonka, London, 27 bls. rags.
P. Berlowitz, Volendam, Rotterdam, 65 bls. rags.
Darmstadt, Scott & Courtney, Volendam, Rotterdam, 114 bls. bagging.
American Exchange Irving Trust Co., Volendam, Rotterdam, 139 bls. cotton waste.
Darmstadt, Scott & Courtney, Ambridge, Rotterdam, 147 bls. bagging.
Darmstadt, Scott & Courtney, Kerhonkson, Manchester, 68 bls. bagging.
Leigh Textile Co., Kerhonkson, Manchester, 50 bls. cotton waste.
J. Cohen Sons, Inc., Kerhonkson, Manchester, 10 bls. new cuttings.
Equitable Trust Co., Kerhonkson, Manchester, 59 bls. new cuttings.
E. Butterworth & Co., Inc., Kerhonkson, Manchester, 66 bls. bagging.
R. F. Downing & Co., Kerhonkson, Manchester, 39 bls. paper stock.
Castle & Overton, Inc., Kerhonkson, Manchester, 159 bls. bagging.
Castle & Overton, Inc., Kerhonkson, Manchester, 20 bls. rags.
G. P. Lotterhand, Stuttgart, Bremen, 6 bls. rags.
A. W. Fenton, Inc., Stuttgart, Bremen, 27 bls. rags.
M. Snedeker Corp., Franconia, Liverpool, 69 bls. paper stock.
Manufacturers Trust Co., Deutschland, Hamburg, 8 bls. rags.
Philadelphia Trust Co., Deutschland, Hamburg, 14 bls. rags.
E. Butterworth & Co., Inc., Cedric, Liverpool, 87 bls. bagging.
E. Butterworth & Co., Inc., Cedric, Liverpool, 30 bls. old canvas.
Manufacturers Trust Co., Berlin, Bremen, 13 bls. rags.
Royal Bank of Canada, Berlin, Bremen, 96 bls. cotton waste.
Interstate Trust Co., Berlin, Bremen, 70 bls. bagging.
Interstate Trust Co., Berlin, Bremen, 72 bls. rags.
Kidder Peabody Accep. Corp., Vancouver Maru, Hamburg, 152 bls. rags.
Chemical National Co., Blue Triangle, Valencia, 132 bls. rags.

(*Continued on page 68*)



# HIGHEST SPEED
## Paper Bag Machinery

**Get My Quotations Before Placing Your Orders**
***Special Machinery Designed and Built***

**A. L. PARRISH**
**1702 Robinson St., South Bend, Ind.**

*Maintains your high standards of quality papers*

# ALPHA FIBRE

*for the making of fine paper*

Alpha Fibre's exceptionally high cellulose content imparts to papers those outstanding qualities which previously were obtainable only through the use of good rags.

Paper hitherto made without rag stock, can be brought to the high quality goal by the use of Alpha Fibre.

**WRITE FOR PARTICULARS**

**BROWN COMPANY**
*founded 1852*
**PORTLAND, MAINE**
PULP SALES DIVISION

# The B Co. INC. QUALITY PULPS

HAFSLUND NORWAY — **"HAFSLUND BEAR" Bleached Sulphite**

F:HAGA — **"FORSHAGA" Bleached Sulphite**

KRAFT HURUM NORWAY SPECIAL — **"HURUM SPECIAL" Extra Strong Kraft**

KOOS BAC — **"BAMBLE" Extra Strong Kraft**

***Fresh Monthly Shipments—No Closed Winter Season***

**The Borregaard Company**
Incorporated
200 FIFTH AVENUE NEW YORK, N. Y.

# Dietz Toilet Paper Machines

For making Toilet and Paper Towel Rolls
(With or without perforations)

**Self Adjusting — Easy to Operate**

Also

**AUTOMATIC TUBE MACHINES**

Manufacturers of Sanitary Crepe Towel Machines, Slitting and Rewinding Machines, Drop Roll Slitting Machines, Photo Mount Beveling Machines, Rotary Card Cutting Machines, etc.
Correspondence solicited

## DIETZ MACHINE WORKS

126-128 W. Fontaine Street
Cor. Waterloo St., (between Front & Second St.)
and below Diamond St.

# THE CLARK-AIKEN CO.

Successors to
H. C. Clark & Son Machine Co.

## PAPER MILL MACHINERY

**LEE, MASS.**

Revolving Paper Cutters—Rag Cutters—Cylinder Paper Machines—Washing and Beating Engines—Chilled Iron and Paper Calenders—Fan and Stuff Pumps—Engine Roll Bars and Bed Plates—
Cylinder Molds—Marshall Drives—Slitters and Rewinders—Reels—Dryers with Improved Packing Boxes—Wet Machines—Gun Metal and Rubber Rolls—Rolls Reground.

# Imports of Paper and Paper Stock

(*Continued from page 66*)

Chemical National Co., Blue Triangle, Barcelona, 174 bls. rags.
Equitable Trust Co., Blue Triangle, Barcelona, 176 bls. rags.
E. J. Keller Co., Inc., West Eldara, Antwerp, 168 bls. flax waste.
Darmstadt, Scott & Courtney, West Eldara, Antwerp, 35 bls. rags.
American Exchange Irving Trust Co., Suevier, Antwerp, 128 bls. rags.
Castle & Overton, Inc., Suevier, Antwerp, 112 bls. rags.
A. W. Fenton, Inc., Pipestone County, Bordeaux, 210 bls. rags.
V. Galaup, Pipestone County, Bordeaux, 35 bls. rags.
E. J. Keller Co., Inc., Pipestone County, Bordeaux, 33 bls. rags.
The Barrett Co., Pipestone County, Bordeaux, 176 bls. rags.
V. Galaup, Pipestone County, Dunkirk, 177 bls. rags.
C. R. Spence, New York City, Bristol, 450 bls. rags.
Castle & Overton, Inc., New York City, Bristol, 170 bls. bagging.
Castle & Overton, Inc., Veendam, Rotterdam, 361 bls. rags.
Union Trust Co., Estrella, Barcelona, 163 bls. rags.
Fidelity Trust Co., Estrella, Barcelona, 148 bls. rags.
Chemical National Bank, Estrella, Barcelona, 78 bls. rags.
E. J. Keller Co., Inc., Estrella, ——, 159 bls. rags.
E. J. Keller Co., Inc., Francisco, ——, 404 bls. flax waste.
E. J. Keller Co., Inc., Francisco, ——, 26 bls. linen threads.
Chase National Bank, Reliance, Hamburg, 19 bls. rags.
Castle & Overton, Inc., Bristol City, Bristol, 92 bls. bagging.
Castle & Overton, Inc., Carlier, Antwerp, 378 bls. bagging.
Castle & Overton, Inc., Carlier, Antwerp, 110 bls. rags.
Castle & Overton, Inc., Thuringia, Hamburg, 17 bls. rags.
Castle & Overton, Inc., Half Moon, Greece, 46 bls. bagging.
Castle & Overton, Inc., A. Ballin, Hamburg, 21 bls. rags.
Castle & Overton, Inc., Alberta, Italy, 183 bls. rags.
Castle & Overton, Inc., Frederick VIII, Denmark, 172 bls. bagging.
Castle & Overton, Inc., Caucasier, Antwerp, 56 bls. bagging.
Castle & Overton, Inc., Francisco, Antwerp, 200 bls. flax waste.
Castle & Overton, Inc., Francisco, Antwerp, 55 bls. rags.
Castle & Overton, Inc., Misty Law, Egypt, 102 bls. rags.

### OLD ROPE

W. Steck & Co., Ambridge, Rotterdam, 50 bls.
American Exchange Irving Trust Co., Kerhonkson, Manchester, 41 bls.
American Exchange Irving Trust Co., Suevier, Antwerp, 62 bls.
American Exchange Irving Trust Co., Veendam, Rotterdam, 72 bls.
Brown Bros. & Co., Veendam, Rotterdam, 83 coils.
Brown Bros. & Co., New York City, Bristol, 166 coils.

### CASEIN

Castle & Overton, Inc., Phidias, Buenos Aires, 250 bags.

### CHINA CLAY

Moore & Munger, Holland Maru, Fowey, 511 tons, 14 cwt.
English China Clays Sales Co., Holland Maru, Fowey, 1,095 tons, 12 cwt.
L. A. Salomon & Bros., New York City, Bristol, 74 casks.
L. A. Salomon & Bros., New York City, Bristol, 160 bags.
C. T. Wilson & Co., New York City, Bristol, 25 casks.

### WOOD PULP WADDING

Birn & Wachenheim, Veendam, Rotterdam, 50 bls.

### WOOD PULP BOARDS

Lagerloef Trading Co., Stuttgart, Bremen, 169 bls.

### WOOD PULP

Acer & Co. (Albany, N. Y.), Dago, Chandler, 6,961 bls. sulphite.
Castle & Overton, Inc., Volendam, Rotterdam, 145 bls. wood pulp.
M. Gottesman & Co., Inc., Ambridge, Rotterdam, 510 bls. sulphite, 51 tons.
Castle & Overton, Inc., Deutschland, Hamburg, 354 bls. wood pulp, 53 tons.
J. Andersen & Co., Ranenfjord, Oslo, 50 bls. wood pulp.
Chemical National Bank, Renenfjord, Tofte, 3,600 bls. sulphite.
E. J. Keller Co., Inc., Vancouver Maru, ——, 714 bls. wood pulp, 109 tons.
J. Andersen & Co., Consul Olsson, Stugsund, 125 bls. sulphite, 25 tons.
J. Andersen & Co., Consul Olsson, Hernosand, 5,250 bls. sulphite, 875 tons.
J. Andersen & Co., Consul Olsson, Hernosand, 1,800 bls. sulphate, 360 tons.
Pagel, Horton & Co., Inc., Consul Olsson, Hernosand, 1,884 bls. sulphite, 309 tons.
Bulkley, Dunton & Co., Consul Olsson, ——, 2,400 bls. sulphate, 480 tons.
Bulkley, Dunton & Co., Consul Olsson, ——, 4,425 bls. sulphite, 885 tons.
M. Gottesman & Co., Inc., Laura C., Sebenico, 1,200 bls. wood pulp.
M. Gottesman & Co., Inc., Bockenheim, Stockholm, 750 bls. wood pulp.

## PHILADELPHIA IMPORTS

WEEK ENDING SEPTEMBER 22, 1928

Congoleum Nairn Co., Blue Triangle, Alexandria, 300 bls. rags.
Philadelphia National Bank, Pipestone County, Bordeaux, 93 bls. rags.
Castle & Overton, Inc., Pipestone County, Bordeaux, 652 bls. rags.
D. I. Murphy, Pipestone County, Bordeaux, 326 bls. rags.
G. W. Millar & Co., Pipestone County, Bordeaux, 47 bls. rags.
Bank of The Manhattan Co., Pipestone County, Dunkirk, 62 bls. rags.
G. W. Millar & Co., Pipestone County, Dunkirk, 133 bls. rags.
J. Andersen & Co., Consul Olsson, Hernosand, 1,680 bls. sulphite, 280 tons.
J. Andersen & Co., Consul Olsson, Pitea, 3,000 bls. sulphate, 500 tons.
Pagel, Horton & Co., Consul Olsson, Pitea, 150 bls. sulphate, 25 tons.
Bulkley, Dunton & Co., Consul Olsson, ——, 1,000 bls. sulphate, 200 tons.
Bulkley, Dunton & Co., Etna, ——, 500 bls. wood pulp.
C. T. Wilson & Co., Inc., New York City, Bristol, 240 bags china clay.
H. J. Young, New York City, Bristol, 301 bls. waste paper.
C. B. Richard & Co., New York City, Bristol, 242 bls. rags.
E. Butterworth & Co., Inc., New York City, Bristol, 269 bls. rags.
Castle & Overton, Inc., Estonia, Germany, 280 bls. rags.
Castle & Overton, Inc., Turpin, Germany, 39 bls. rags.
Castle & Overton, Inc., Liberty, France, 47 bls. rags.
Castle & Overton, Inc., Westfalen, Germany, 261 bls. rags.
Castle & Overton, Inc., Hamburg Maru, Germany, 346 bls. rags.
Castle & Overton, Inc., London Merchant, England, 344 bls. rags.
Castle & Overton, Inc., Hagen, Germany, 808 bls. wood pulp.
Castle & Overton, Inc., Hagen, Germany, 117 bls. rags.
Castle & Overton, Inc., ——, Germany, 286 bls. wood pulp.
Castle & Overton, Inc., Darian, England, 41 bls. rags.
Castle & Overton, Inc., New York City, Bristol, 177 bls. rags.
Castle & Overton, Inc., City of Flint, England, 435 bls. rags.
Castle & Overton, Inc., Saco, Antwerp, 241 bls. rags.
Castle & Overton, Inc., Tomalva, Antwerp, 78 bls. rags.
Castle & Overton, Inc., Manchester Hero, England, 193 bls. rags.
Castle & Overton, Inc., Harburg, Germany, 4,615 bls. wood pulp.
Castle & Overton, Inc., Harburg, Germany, 2 cs. wire cloth.
Castle & Overton, Inc., West Harcuvar, Germany, 326 bls. rags.
Castle & Overton, Inc., Boston City, Bristol, 162 bls. rags.

## CHARLESTON IMPORTS

WEEK ENDING SEPTEMBER 22, 1928

Castle & Overton, Inc., Wildwood, Liverpool, 78 bls. bagging.

## BOSTON IMPORTS

WEEK ENDING SEPTEMBER 22, 1928

American Paper & Tube Co., Pres. Garfield, Genoa, 15 pkgs. paper.
A. Bloch & Co., Pipestone County, Havre, 56 bls. cuttings.
A. Bloch & Co., Pipestone County, Havre, 113 bls. bagging.
Bank of Commerce, Pipestone County, Havre, 107 bls. rags.
J. Andersen & Co., Laura C., Trieste, 2,560 bls. wood pulp.
J. Andersen & Co., Laura C., Trieste, 3,200 bls. wood pulp.
Bulkley, Dunton & Co., Havo, ——, 625 bls. wood pulp.
Bulkley, Dunton & Co., Natirar, ——, 625 bls. wood pulp.
Castle & Overton, Inc., West Harcuvar, Germany, 2,852 bls. wood pulp.

## PORTLAND IMPORTS

WEEK ENDING SEPTEMBER 22, 1928

The Borregaard Co., Inc., Minnequa, Gothenburg, 1,750 bls. wood pulp, 355 tons.
Waterfalls Papermills Co., Minnequa, Gothenburg, 5,500 bls. wood pulp, 1,116 tons.
Waterfalls Papermills Co., Minnequa, Gothenburg, 26 rolls paper.
M. Gottesman & Co., Inc., Odensholm, Stockholm, 600 bls. wood pulp.

## BALTIMORE IMPORTS

WEEK ENDING SEPTEMBER 22, 1928

National City Bank, Ambridge, Rotterdam, 560 bls. bagging.
International Accep. Bank, Ranenfjord, Oslo, 800 bls. sulphate.
Parsons & Whittemore, Inc., Ranenfjord, Oslo, 200 bls. sulphate.
Chemical National Bank, Ranenfjord, Oslo, 1,800 bls. sulphite.
F. H. Shallus & Co., West Eldara, Rotterdam, 73 rolls straw boards.
National City Bank, West Eldara, Rotterdam, 421 bls. rags.
National City Bank, West Eldara, Antwerp, 102 bls. rags.
Congoleum Nairn Co., West Eldara, Antwerp, 950 bls. rags.
Congoleum Nairn Co., West Eldara, Antwerp, 260 bls. bagging.
Congoleum Nairn Co., Pipestone County, Bordeaux, 560 bls. rags.
S. Shapira, Pipestone County, Dunkirk, 153 bls. rags.
Congoleum Nairn Co., Pipestone County, Dunkirk, 111 bls. rags.
M. Gottesman & Co., Inc., Stureholm, Stockholm, 2,050 bls. wood pulp.
M. Gottesman & Co., Inc., Bockenheim, Stockholm, 1,275 bls. wood pulp.
Bulkley, Dunton & Co., Hannover, ——, 2,250 bls. wood pulp.
Bulkley, Dunton & Co., Havelland, ——, 125 bls. wood pulp.
Bulkley, Dunton & Co., Turpin, ——, 508 bls. wood pulp.
Castle & Overton, Inc., Hagen, Germany, 3,433 bls. wood pulp.
Castle & Overton, Inc., Harburg, Germany, 5,820 bls. wood pulp.

## NORFOLK IMPORTS

WEEK ENDING SEPTEMBER 22, 1928

Chase National Bank, Ambridge, Rotterdam, 60 bls. rags.
Old Dominion Paper Co., Ranenfjord, Hokksund, 60 rolls news print.
Chemical National Bank, Ranenfjord, Tofte, 720 bls. sulphite.
Darmstadt, Scott & Courtney, West Eldara, Antwerp, 66 bls. bagging.

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***A Trial Installation Will Demonstrate Operative Economy and Better Product.***

**This improvement consists of 2 aluminum side-rails, which are permanently screwed to top flange of the suction box. Between these rails are diagonally inserted wooden sections of select green Vermont maple, with the grain of wood UPRIGHT. Write for prices and list of prominent users.**

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## New York Market Review

Office of the PAPER TRADE JOURNAL,
Wednesday, September 26, 1928.

Now that the holiday season has practically ended, conditions in the local paper market are showing signs of improvement. The various grades of paper are in better demand and prices are generally holding to schedule. Sales forces of the leading paper houses are beginning their autumn campaign with every prospect of a successful wind up for the year.

Production of news print in North America is being maintained at about 79 per cent of capacity. Statistics gathered by the News Print Service Bureau show that stocks of news print paper at Canadian mills totalled 52,108 tons at the end of August, and at United States mills 40,838 tons, making a combined total of 92,946 tons, which was equivalent to 6.2 days' average production.

Demand for paper board was quite active during the past week and prices are being maintained at former levels, in most instances. The undertone of the fine paper market is strong while tissues are in normal request. The coarse paper market is in a sound position and wrapping paper is going forward in good volume.

### Mechanical Pulp

No radical changes were reported in the ground wood market and most of the business transacted was routine. Production has been maintained in sufficient volume to take care of current requirements. Shipments against contract are proceeding at a fair pace. Prices are holding to former levels and shading is infrequent.

### Chemical Pulp

Trading in the local chemical pulp market was fairly active during the week and both imported and domestic grades were in steady request. Bleached sulphite continues to display great strength and, with offerings decidedly limited, prices rule very firm. Quotations on the other grades are generally holding to schedule.

### Old Rope and Bagging

The old rope market is in a satisfactory position. Both foreign and domestic manila rope are in particularly good request at present. Prices are holding to former levels. The bagging market is practically unchanged. Roofing bagging is moving in fair volume. Scrap bagging and gunny bagging continue rather quiet. Prices remain unaltered, in most instances.

### Rags

Mill interest in domestic and foreign rags is gradually improving and there are more inquiries around than of late. Many plants are believed to be making provisions for increased production and the position of the local market should benefit thereby. Prices are generally holding up well and there is less talk of concessions.

### Waste Paper

Conditions in the paper stock market are considered satisfactory for the time of the year. Perhaps the feature of the week was the increased demand for old kraft machine compressed bales which have advanced and are now being quoted at from 1.85 to 1.95 All grades of waste paper used in the board mills are still in excellent request.

### Twine

With wrapping paper in good request the twine market is benefitting accordingly. Business should expand materially during the closing months of the year. Supplies are moving into consumption in a satisfactory manner. Prices are generally being maintained at former levels and brokers views are quite firm.

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### Superintendents Meet at York

YORK, Pa., September 24, 1928.—An attractive program was arranged for the anual meeting of the Pennsylvania-New Jersey division of the American Pulp and Paper Mill Superintendents Association, which was held Friday and Saturday, September 21 and 22, at the Hotel Yorktowne. S. C. Wentz, superintendent of the P. H. Glatfelter Company of Spring Grove, was chairman of the committee on arrangements. There was an informal get-together meeting on Friday evening at the hotel, when members registered and received thir badges.

The meeting was opened on Saturday morning at 8:30 o'clock with registration and a conference of division officers. An automobile trip to Spring Grove, where the members of the association viewed the P. H. Glatfelter mill in operation, was scheduled for Saturday morning. After the inspection of the mill, luncheon was served with the P. H. Glatfelter Company as hosts.

Saturday afternoon from 12:30 to 5 o'clock was occupied with tours of inspection to the plants of the York Haven Paper Company, York Haven, Pa., Schmidt & Ault Paper Company, Penn Fibre Board Corporation, and the Hardinge Manufacturing Company of York.

In the evening at the Hotel Yorktowne, beginning at 6 o'clock, a business meeting was held at which a paper describing the operation of the Terry steam turbine for paper machine drives was read. After the meeting a dinner was served in the ball room of the hotel, Mayor Jacob E. Weaver delivering an address of welcome at the banquet. Judge Henry C. Niles of the York County courts addressed the members of the association on fundamental industrial problems.

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### Charges Restraint in Trade

BOSTON, Mass., September 19, 1928.—Suit for $100,000 was filed in the Federal Court here yesterday by Wilbert F. Barrett of Haverhill, who charges three defendants with conspiracy in restraint of trade. The suit is brought under the Sherman Act.

The defendants are the Chemical Paper Manufacturing Company of Holyoke; Bird & Sons, Inc., of East Walpole, and Robert Gair Company of Haverhill.

Barrett charges that his business has been injured by the tactics of the defendants and the Paperboard Industries Association, to which they belong. He charges that the defendants "did illegally and unlawfully create and maintain a monopoly in paper stock and paper board by illegally and unlawfully controlling and regulating the demand and consumption of those products."

---

### May Open Paper Mill at Hazelton, Pa.

Representatives of a paper mill, says the *Plain Speaker* of Hazelton, Pa., have been making an investigation of the Parryville dam and other conditions in Parryville with a view of constructing a mill on the site of the Parryville Furnace, which has been abandoned and is now being dismantled.

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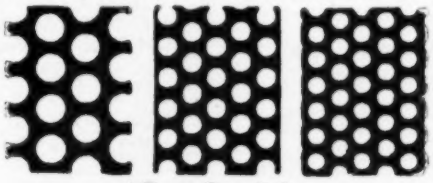

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# Miscellaneous Markets

Office of the PAPER TRADE JOURNAL,
Wednesday, September 26, 1928.

BLANC FIXE.—Steadiness prevailed in the blanc fixe market. Both the pulp and the powder continue in good request. Prices remain unchanged. The pulp is still selling at from $42.50 to $45.00 per ton, in bulk, and the powder is quoted at from 3½ cents to 3⅝ cents a pound, in barrels, at works.

BLEACHING POWDER.—Contract withdrawals of bleaching powder are going forward more regularly. Prices are generally holding to schedule and shading is infrequent. Bleaching powder is still offered at from $2.00 to $2.35 per 100 pounds, in large drums, at works, according to quantity and grade.

CASEIN.—The casein market was slightly easier during the past week, although demand for this product is about normal. Domestic casein is quoted at from 16 cents to 17¼ cents per pound, and imported casein is selling at from 16½ cents to 17¼ cents per pound, all in bags, car lot quantities.

CAUSTIC SODA.—Consumption of caustic soda has been heavy of late. Shipments against contract are moving in good volume. Solid caustic soda is selling at from $2.90 to $2.95 per 100 pounds. The flake and the ground are quoted at from $3.30 to $3.35 per 100 pounds, in large drums, at works.

CHINA CLAY.—Demand for china clay is persistent. Prices are holding to former levels without difficulty. Imported china clay is selling at from $15 to $25 a ton, ship side. Domestic paper making clay is quoted at from $8 to $9 a ton, at mine, and pulverized at from $10 to $12 a ton.

CHLORINE.—The undertone of the chlorine market is strong. Contract shipments are proceeding at a steady pace. Prices remain unchanged. Chlorine is quoted at 3½ cents a pound, in tanks, or multi-unit cars, at works, on contract orders. The spot quotation ranges from 3¾ cents to 4 cents a pound.

ROSIN.—Conditions in the rosin market continue to improve. At the naval stores, the grades of gum rosin used in the paper mills are quoted at from $9.58 to $9.65 per 280 pounds, ex dock, in barrels. Wood rosin is selling at from $7.00 to $7.80 per 280 pounds, at southern shipping points.

SALT CAKE.—The salt cake market is in a sound position. Demand is excellent and contract shipments are going forward in satisfactory volume. Prices remain steady. Salt cake is quoted at from $15 to $17 a ton, in bulk, at works. Chrome salt cake is selling at from $14 to $15 a ton, in bulk, at works.

SODA ASH.—Consumption of soda ash is being maintained in excellent volume. Demand for this product is steady and prices are holding to former levels. Contract quotations on soda ash, in car lots, at works, per 100 pounds, are still as follows: in bags, $1.32½, and in barrels, $1.55.

STARCH.—No radical changes were recorded in the starch market. The contract movement is about normal. Inquiries for future business are fairly numerous. Prices remain unaltered. Special paper making starch is quoted at $4.07 per 100 pounds, in bags, and at $4.24 per 100 pounds, in barrels.

SULPHATE OF ALUMINA.—The sulphate of alumina market is exhibiting a firm tendency. Shipments against contract are moving in heavy volume. Commercial grades of sulphate of alumina are quoted at from $1.40 to $1.55 per 100 pounds. The iron free is selling at from $1.90 to $2.05 per 100 pounds.

SULPHUR.—Production of sulphur is being maintained in sufficient volume to take care of current requirements. Contract withdrawals are going forward in a satisfactory manner. Prices remain steady. Sulphur is quoted at from $18 to $19 a ton, in bulk, at mine, on contract orders. The spot quotation is $20.

TALC.—Supplies of talc are moving into consumption at a normal pace. Most of the business transacted during the past week was along routine lines. Domestic talc is quoted at from $16 to $18 a ton, in bulk, at eastern mines. Imported talc is selling at from $18 to $20 per ton, ship side.

# Market Quotations

## Paper

(F. o. b. Mill)

| | | |
|---|---|---|
| Ledgers | 11.00 | @38.00 |
| Bonds | 9.00 | @45.00 |
| **Writings—** | | |
| Extra Superfine | 14.00 | @32.00 |
| Superfine | 14.00 | @32.00 |
| Tub sized | 10.00 | @15.00 |
| Engine sized | 8.00 | @11.00 |
| **News—** | | |
| Rolls, contract | 3.25 | @ — |
| Rolls, transient | 3.25 | @ 3.50 |
| Sheets | 3.65 | @ 3.85 |
| Side Runs | 3.00 | @ 3.75 |
| **Book, Cased—** | | |
| S. & S. C. | 6.35 | @ 7.75 |
| M. F. | 6.25 | @ 7.75 |
| Coated and Enamel | 8.00 | @15.00 |
| Lithograph | 8.00 | @15.00 |
| **Tissues—Per Ream—** | | |
| White No. 1 | .75 | @ 1.00 |
| Anti-Tarnish | 1.10 | @ 1.90 |
| Colored | 1.00 | @ 2.00 |
| White No. 2 | .75 | @ .85 |
| Kraft | .90 | @ 1.00 |
| Manila | .75 | @ .85 |
| **Kraft—** | | |
| No. 1 Domestic | 6.25 | @ 6.50 |
| No. 2 Domestic | 4.25 | @ 4.50 |
| Southern | 4.00 | @ 4.25 |
| Imported | 6.50 | @ 7.00 |
| **Manila—** | | |
| No. 1 Jute | 9.00 | @ 9.25 |
| No. 2 Jute | 7.75 | @ 8.50 |
| No. 1 Wood | 4.75 | @ 5.25 |
| No. 2 Wood | 4.00 | @ 4.50 |
| Butchers | 3.75 | @ 4.25 |
| **Fibre Papers—** | | |
| No. 1 Fibre | 5.00 | @ 5.50 |
| No. 2 Fibre | 4.75 | @ 5.25 |
| Common Bogus | 2.75 | @ 3.00 |
| Screenings | 3.00 | @ 3.25 |
| Card Middles | 4.00 | @ 5.00 |
| **Glassine—** | | |
| Bleached, basis 25 lbs. | 13.00 | @16.00 |
| Bleached, basis 20 lbs. | 15.00 | @16.00 |

(Delivered New York)

| | | |
|---|---|---|
| **Boards—per ton—** | | |
| News | 42.50 | @45.00 |
| Straw | 52.50 | @55.00 |
| Chip | 40.00 | @42.50 |
| Binders' Boards | 65.00 | @67.50 |
| Sgl. Mla. Lt. Chip. | 50.00 | @52.50 |
| Wood Pulp | 80.00 | @85.00 |
| Container | 57.50 | @60.00 |
| 85 Test Jute Liner. | 55.00 | @57.50 |

## Mechanical Pulp

(Ex-Dock)

| | | |
|---|---|---|
| **No. 1 Imported—** | | |
| Moist | 30.00 | @31.25 |
| Dry | 32.00 | @34.00 |

(F. o. b. Mill)

| | | |
|---|---|---|
| No. 1 Domestic | 26.00 | @29.00 |
| Screenings | 15.00 | @20.00 |

## Chemical Pulp

(Ex-Dock, Atlantic Ports)

| | | |
|---|---|---|
| **Sulphite (Imported)—** | | |
| Bleached | 3.65 | @ 4.25 |
| Easy Bleaching | 2.70 | @ 2.90 |
| No. 1 strong unbleached | 2.60 | @ 2.70 |
| Mitscherlich unbleached | 2.65 | @ 3.25 |
| No. 2 strong unbleached | 2.50 | @ 2.60 |
| No. 1 Kraft | 2.60 | @ 2.75 |
| No. 2 Kraft | 2.40 | @ 2.50 |
| **Sulphate—** | | |
| Bleached | 3.75 | @ 3.85 |

(F. o. b. Pulp Mill)

| | | |
|---|---|---|
| **Sulphite (Domestic)—** | | |
| Bleached | 3.40 | @ 4.75 |
| Easy Bleaching Sulphite | 2.60 | @ 2.75 |
| News Sulphite | 2.40 | @ 2.65 |
| Mitscherlich | 3.00 | @ 3.70 |
| Kraft (Domestic) | 2.70 | @ 3.30 |
| Soda Bleached | 3.15 | @ 3.50 |
| **Sulphate Screenings—** | | |
| Coarse | .75 | @ .85 |
| Refined | 1.50 | @ 1.65 |

## Domestic Rags

### New Rags

(Prices to Mill f. o. b. N. Y.)

| | | |
|---|---|---|
| **Shirt Cuttings—** | | |
| New White, No. 1 | 11.00 | @11.50 |
| New White, No. 2 | 8.00 | @ 8.50 |
| Silesias No. 1 | 7 25 | @ 7.75 |
| New Unbleached | 10.50 | @11.00 |
| Washables | 4.25 | @ 4.75 |
| Fancy | 5.50 | @ 6.00 |
| Blue Overall | 6.75 | @ 7.25 |
| New Blue Prints | 5.25 | @ 5.50 |
| New Soft Blacks | 5.25 | @ 5.75 |
| **Mixed Khaki Cuttings** | 4.75 | @ 5.25 |
| **Pink Corset Cuttings** | 8.00 | @ 8.50 |
| **O. D. Khaki Cuttings** | 5.25 | @ 5.75 |
| **Men's Corduroy** | 3.75 | @ 4.25 |
| **New Mixed Blacks** | 3.50 | @ 3.75 |

### Old Rags

| | | |
|---|---|---|
| **White, No. 1—** | | |
| Repacked | 5.50 | @ 6.00 |
| Miscellaneous | 4.50 | @ 5.00 |
| **White, No. 2—** | | |
| Repacked | 3.00 | @ 3.50 |
| Miscellaneous | 2.50 | @ 2.75 |
| **St. Soiled, White** | 2.00 | @ 2.15 |
| **Thirds and Blues—** | | |
| Repacked | 2.25 | @ 2.50 |
| Miscellaneous | 1.75 | @ 2.00 |
| **Black Stockings** | 3.25 | @ 3.75 |
| **Roofing Rags—** | | |
| Cloth Strippings | 1.70 | @ 1.80 |
| No. 1 | 1.70 | @ 1.80 |
| No. 2 | 1.55 | @ 1.65 |
| No. 3 | 1.30 | @ 1.40 |
| No. 4 | 1.25 | @ 1.35 |
| No. 5A | .95 | @ 1.05 |

## Foreign Rags

| | | |
|---|---|---|
| New Dark Cuttings | 2.50 | @ 3.00 |
| New Mixed Cuttings | 2.75 | @ 3.25 |
| New Light Silesias | 7.00 | @ 7.50 |
| Light Flannelettes | 7.50 | @ 8.00 |
| Unbleached Cottons | 10.00 | @11.00 |
| New White Cuttings | 10.50 | @11.50 |
| New Light Oxfords | 7.00 | @ 7.50 |
| New Light Prints | 5.50 | @ 6.50 |
| No. 1 White Linens | 7.25 | @ 8.00 |
| No. 2 White Linens | 5.50 | @ 6.25 |
| No. 3 White Linens | 4.50 | @ 5.00 |
| No. 4 White Linens | 3.00 | @ 3.50 |
| **Old Extra Light Prints** | 2.75 | @ 3.25 |
| Ord. Light Prints | 2.25 | @ 2.50 |
| Med. Light Prints | 1.90 | @ 2.10 |
| Dutch Blue Cottons | 2.25 | @ 2.50 |
| German Blue Linens | 2.50 | @ 2.75 |
| German Blue Cottons | 2.00 | @ 2.25 |
| Checks and Blues | 1.75 | @ 1.90 |
| Lindsay Garments | 1.90 | @ 2.00 |
| Dark Cottons | 1.65 | @ 1.75 |
| Old Shapperies | 1.55 | @ 1.65 |
| New Shapperies | 1.50 | @ 1.60 |
| French Blues | 2.10 | @ 2.25 |

## Old Rope and Bagging

(Prices to Mill f. o. b. N. Y.)

| | | |
|---|---|---|
| **Gunny No. 1—** | | |
| Foreign | 1.60 | @ 1.70 |
| Domestic | 1.70 | @ 1.75 |
| Wool Tares, light | 1.60 | @ 1.65 |
| Wool Tares, heavy | 1.60 | @ 1.65 |
| Bright Bagging | 1.60 | @ 1.65 |
| Small Mixed Rope | 1.25 | @ 1.40 |
| **Manila Rope—** | | |
| Foreign | 3.35 | @ 3.65 |
| Domestic | 3.25 | @ 4.00 |
| New Burlap Cut | 2.75 | @ 3.00 |
| **Hessian Jute Threads—** | | |
| Foreign | 3.50 | @ 4.00 |
| Domestic | 3.25 | @ 3.50 |

## Old Waste Papers

(F. o. b. New York)

| | | |
|---|---|---|
| **Shavings—** | | |
| Hard, white, No. 1 | 3.25 | @ 3.50 |
| Hard, white, No. 2 | 2.40 | @ 2.55 |
| Soft, White, No. 1 | 2.35 | @ 2.50 |
| **White envelope cuttings** | 3.25 | @ 3.50 |
| **Flat Stock—** | | |
| Stitchless | 1.60 | @ 1.70 |
| Overissue Mag. | 1.60 | @ 1.70 |
| Solid Flat Book | 1.45 | @ 1.50 |
| Crumpled No. 1 | 1.05 | @ 1.15 |
| **Solid Book Ledger** | 2.00 | @ 2.10 |
| **Ledger Stock** | 1.60 | @ 1.75 |
| **Manilas—** | | |
| New B. B. Chips | .65 | @ .75 |
| New Env. Cut | 2.40 | @ 2.60 |
| New Cuttings | 1.60 | @ 1.85 |
| Extra No. 1 old | 1.25 | @ 1.35 |
| Print | .80 | @ .85 |
| Container | .70 | @ .75 |
| Bogus Wrapper | .75 | @ .85 |
| **Old Kraft Machine Compressed bales** | 1.85 | @ 1.95 |
| **News—** | | |
| No. 1 White News | 1.75 | @ 1.80 |
| Strictly Overissue | .85 | @ .95 |
| Strictly Folded | .70 | @ .80 |
| **No. 1 Mixed Paper** | .60 | @ .65 |
| Common Paper | .35 | @ .40 |

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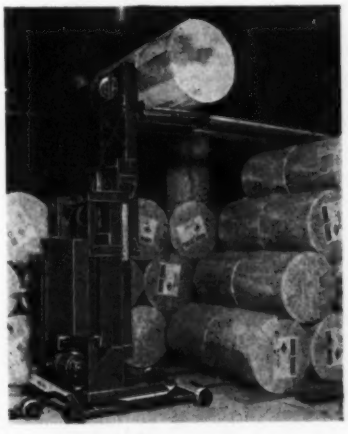

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# THE REVOLVATOR

Many of the largest as well as the smaller newspaper publishers use Revolvators for handling rolls of paper. Generally the space allotted for paper storage in newspaper plants is limited, which necessitates the utilizing of practically every cubic foot. Of every device or machine considered, the Revolvator, in the opinion of many publishers, best fulfills the requirements, from every angle of low first cost, maintenance, operation, safety, speed and labor. In addition, The Revolvator being portable, may be used for other work. Send for descriptive bulletin PT and get the complete story—now.

PORTABLE AND STATIONARY ELEVATORS
LIFTRUCKS—STORAGE RACKS

**REVOLVATOR CO.**

337 GARFIELD AVENUE JERSEY CITY, N. J.

### Twines

(F. o. b. Mill)

| | | | |
|---|---|---|---|
| Cotton— | | | |
| No. 1 | .39 | @ | .40 |
| No. 2 | .37 | @ | .38 |
| No. 3 | .36 | @ | .37 |
| B. C., 18 basis | .38 | @ | .40 |
| A. B. Italian, 18 basis | .48 | @ | .53 |
| Finished Jute— | | | |
| Dark 18 basis | .24 | @ | .25 |
| Light 18 basis | .27 | @ | .28 |
| Jute Wrapping, 3-6 Ply— | | | |
| No. 1 | .21 | @ | .23 |
| No. 2 | .20 | @ | .22 |
| Tube Rope— | | | |
| 4-ply and larger | .18 | @ | .19 |
| Fine Tube Yarn— | | | |
| 5-ply and larger | .23 | @ | .27 |
| 4-ply | .24 | @ | .28 |
| 3-ply | .26 | @ | .30 |
| Unfinished India— | | | |
| Basis | .16 | @ | .17 |
| Paper Makers Twine | | | |
| Balls | .13 | @ | .15 |
| Box Twine, 2-3 ply | .17 | @ | .19 |
| Jute Rope | .21 | @ | .23 |
| Ameri. Hemp, 6 | .29 | @ | .31 |
| Sisal Hay Rope— | | | |
| No. 1 Basis | .18 | @ | .20 |
| No. 2 Basis | .16 | @ | .18 |
| Sisal Lath Yarn— | | | |
| No. 1 | .16 | @ | .18 |
| No. 2 | .14 | @ | .16 |
| Manila Rope | .24 | @ | .26 |

## CHICAGO

| | | | |
|---|---|---|---|
| All Rag Bond | .35 | @ | .41 |
| No. 1 Rag Bond | .25 | @ | .35 |
| No. 2 Rag Bond | .14 | @ | .25 |
| Water Marked Sulphite Bond | .09 | @ | .12 |
| Sulphite Bond | .06¾ | @ | .11 |
| Superfine writing | .18 | @ | .24 |
| No. 1 fine writing | .14 | @ | .18 |
| No. 2 fine writing | .12 | @ | .14 |
| No. 3 fine writing | .08½ | @ | .12 |
| No. 1 M. F. Book | .06½ | @ | .07¼ |
| No. 2 M. F. Book | .05¼ | @ | .06¼ |
| No. 1 S.&S.C. Book | .06¾ | @ | .07¾ |
| No. 2 S.&S.C. Book | .05¾ | @ | .06½ |
| Coated Book | .07½ | @ | .12 |
| Coated Label | .07½ | @ | .10 |
| News—Roll, mill | .03½ | @ | .04¼ |
| News—Sheets, mill | .03¾ | @ | .04¾ |
| No. 1 Manila | .04¼ | @ | .05¾ |
| No. 1 Fibre | .04¾ | @ | .05¼ |
| No. 2 Manila | .04¼ | @ | .04¾ |
| Butcher's Manila | .04 | @ | .04½ |
| No. 1 Kraft | .06¼ | @ | .06½ |
| Southern Kraft | .03¾ | @ | .04 |
| No. 2 Kraft | .04 | @ | .04¼ |
| Wood Tag Boards | .04¼ | @ | .06¼ |
| Sulphite Screenings | .03 | @ | .03¾ |
| Manila Tissue— | | | |
| 24x36 Sheet | .07 | @ | .07¾ |
| White Tissue— | | | |
| 20x30 Sheet | .07¼ | @ | .07½ |
| Boards, per ton— (Delivered Central Territory) | | | |
| Plain Chip | 37.50 | @ | 41.00 |
| Solid News | 47.50 | @ | — |
| Manila Lined Chip | 55.00 | @ | — |
| Container Lined— (Delivered Central Territory) | | | |
| 85 Test | 65.00 | @ | 70.00 |
| 100 Test | 70.00 | @ | — |

### Old Papers

(F. o. b. Chicago)

| | | | |
|---|---|---|---|
| Shavings— | | | |
| No. 1 Hard White | 2.80 | @ | 2.90 |
| White Env. Cuttings | 2.90 | @ | 3.00 |
| No. 1 Soft Shavings | 2.50 | @ | 2.60 |
| No. 1 Mixed | 1.00 | @ | 1.05 |
| No. 2 Mixed | .90 | @ | 1.00 |
| Ledger & Writings | 1.55 | @ | 1.65 |
| Solid Books | 1.25 | @ | 1.35 |
| Blanks | 1.70 | @ | 1.80 |
| Krafts | 1.90 | @ | 2.00 |
| New Kraft Cuts | 2.25 | @ | 2.35 |
| Manila Envelope Cuttings | 2.00 | @ | 2.10 |
| Ex. No. 1 Manila | 1.55 | @ | 1.65 |
| Print Manila | .90 | @ | 1.00 |
| Folded News (overissue) | .65 | @ | .75 |
| Old Newspapers— | | | |
| No. 1 | .65 | @ | .75 |
| No. 2 | .60 | @ | .65 |
| Mixed Papers— | | | |
| No. 1 | .70 | @ | .80 |
| Roofing Stocks— (F. o. b. Chicago, net cash) | | | |
| No. 1 | 30.00 | @ | — |
| No. 2 | 28.00 | @ | — |

## PHILADELPHIA

### Paper

(F. o. b. Mill)

| | | | |
|---|---|---|---|
| Bonds | .07 | @ | .40 |
| Ledgers | .11 | @ | .40 |
| Writings— | | | |
| Superfine | .13 | @ | .18 |
| Extra fine | — | @ | .22 |
| Fine | .20 | @ | .26½ |
| Fine, No. 2 | .16 | @ | .25 |
| Fine, No. 3 | .12 | @ | .20 |
| Book, M. F. | .06 | @ | .07 |
| Book, S. S. & C. | .06 | @ | .07½ |
| Book, Coated | .11 | @ | .16 |
| Coated Lithograph | .09 | @ | .12 |
| Labe | .09 | @ | .12 |
| News | .03¾ | @ | .04 |
| No. 1 Jute Manila | .08½ | @ | .09 |
| Manil Sul., No. 1 | .04½ | @ | .06 |
| Manil No. 2 | .04 | @ | .04½ |
| No. 2 Kraft | .05 | @ | .05½ |
| No. 1 Kraft | .06 | @ | .06½ |
| Common Bogus | .02¾ | @ | — |
| Straw Board | 52.50 | @ | 75.00 |
| News Board | 45.00 | @ | — |
| Chip Board | 42.50 | @ | — |
| Wood Pulp Board | 4.50 | @ | 5.00 |
| (Carload Lots) | | | |
| Binder Boards— | | | |
| No. 1, per ton | 80.00 | | |
| No. 2, per ton | 75.00 | | |
| Carload lots | 60.00 | @ | 70.00 |
| Tarred Felts— | | | |
| Regular | 53.00 | @ | 55.00 |
| Slaters (per roll) | .84 | @ | .94 |
| Best Tarred, 1-ply (per roll) | 1.85 | @ | 1.95 |
| Best Tarred, 2-ply (per roll) | 1.44 | @ | 1.54 |
| Best Tarred, 3-ply | 1.93 | @ | 2.08 |

### Domestic Rags (New)

(Price to Mill, f. o. b. Phila.)

| | | | |
|---|---|---|---|
| Shirt Cuttings— | | | |
| New White, No. 1 | .11½ | @ | .12 |
| New White, No. 2 | .07 | @ | .07½ |
| Light Silesias | .07 | @ | .07½ |
| Silesias, No. 1 | .07½ | @ | .08 |
| Black Sil. la. soft. | .05 | @ | .05½ |
| New Unbleached | .10¼ | @ | .11 |
| Washable | .03½ | @ | .04 |
| Fancy | .05½ | @ | .06 |
| Cottons—according to grades— | | | |
| Blue Overall | .07½ | @ | .08 |
| New Blue | — | @ | .04 |
| New Black Soft | .05½ | @ | .06 |
| New Light Seconds | .03 | @ | .03½ |
| Khaki Cuttings | .04½ | @ | .05 |
| Corduroy | .03 | @ | .03½ |
| New Canvas | .08 | @ | .09½ |
| New Black Mixed | .05 | @ | .05½ |

### Bagging

(F. o. b. Phila.)

| | | | |
|---|---|---|---|
| Gunny, No. 1— | | | |
| Foreign | 1.75 | @ | 2.00 |
| Domestic | 1.75 | @ | 2.00 |
| Manila Rope | 3.50 | @ | 4.00 |
| Sisal Rope | 1.50 | @ | — |
| Mixed Rope | 1.10 | @ | 1.25 |
| Scrap Burlaps | 1.40 | @ | 1.50 |
| Wool Tares, heavy | 3.00 | @ | — |
| Mixed Strings | 1.15 | @ | 1.25 |
| No. 1, New Light Burlap | 2.50 | @ | 2.75 |
| New Burlap Cuttings | — | @ | 2.50 |

### Old Papers

(F. o. b. Phila.)

| | | | |
|---|---|---|---|
| Shavings— | | | |
| No. 1 Hard White | 3.20 | @ | 3.25 |
| No. 2 Hard White | 2.75 | @ | 3.00 |
| No. 1 Soft White | 2.50 | @ | 2.60 |
| No. 2 Soft White | 1.90 | @ | 2.00 |
| No. 1 Mixed | 1.50 | @ | 1.60 |
| No. 2 Mixed | .90 | @ | 1.00 |
| Solid Ledger Stock | 1.60 | @ | 1.65 |
| Writing Paper | 1.50 | @ | 1.60 |
| No. 1 Books, heavy | 1.50 | @ | 1.60 |
| No. 2 Books, light | 1.20 | @ | 1.25 |
| No. 1 New Manila | 2.40 | @ | 2.50 |
| No. 1 Old Manila | 1.50 | @ | 1.60 |
| Print Manila | .95 | @ | 1.00 |
| Container Manila | .85 | @ | .90 |
| Old Kraft | 2.25 | @ | 2.50 |
| Common Paper | .55 | @ | .60 |
| No. 1 Mixed Paper | .55 | @ | .60 |
| Straw Board, Chip | .65 | @ | .75 |
| Binders Board, Chip | .65 | @ | .75 |
| Overissue News | .85 | @ | .90 |
| Old Newspaper | .60 | @ | .65 |

### Domestic Rags (Old)

| | | | |
|---|---|---|---|
| White, No. 1— | | | |
| Repacked | 4.25 | @ | 4.50 |
| Miscellaneous | 3.50 | @ | 4.00 |
| White, No. 2— | | | |
| Repacked | .02¼ | @ | .02¾ |
| Miscellaneous | .01¼ | @ | .02 |
| Thirds and Blues— | | | |
| Repacked | 2.00 | @ | 2.25 |
| Miscellaneous | 1.80 | @ | 2.00 |
| Black Stockings | 3.75 | @ | 4.00 |
| Roofing Stock— | | | |
| No. 1 | 1.65 | @ | 1.75 |
| No. 2 | 1.40 | @ | 1.50 |
| No. 3 | 1.25 | @ | — |
| No. 4 | 1.25 | @ | — |
| No. 5A | .85 | @ | .90 |
| B | .80 | @ | .90 |
| C | .70 | @ | .80 |

## BOSTON

### Paper

(F. o. b. Mill)

| | | | |
|---|---|---|---|
| Ledgers— | | | |
| Sulphite | .07½ | @ | .15 |
| Rag content | .15 | @ | .30 |
| All rag | .38 | @ | .52½ |
| Bonds— | | | |
| Sulphite | .06½ | @ | .11½ |
| Rag content | .15 | @ | .30 |
| All rag | .36½ | @ | .65 |
| Writings | .07 | @ | .20 |
| Superfines | .11 | @ | .31 |
| News | .03½ | @ | .04 |
| Book, Super | .06 | @ | .09 |
| Book, M. F. | .05¾ | @ | .08½ |
| Book, Coated | .08½ | @ | .20 |
| Coated Litho | .09 | @ | .12 |
| Label | .09½ | @ | .15 |
| Jute Manila No. 1 | .11 | @ | .13 |
| Manila, Sul. No. 1 | .04¾ | @ | .06½ |
| Manila, Sul. No. 2 | .03¾ | @ | .04½ |
| No. 1 Kraft | .05½ | @ | .06½ |
| No. 2 Kraft | .04 | @ | .04¾ |
| Common Bogus | .02 | @ | .02¾ |
| Delivered New England points | | | |
| Straw Boards, rolls .009 | | | 52.50 |
| Straw Board in Sheets, basis 35s to 70s | | | 54.50 |
| Filled News Board | | | 55.00 |
| Chip Board | | | 47.50 |
| Single Manila Pulp Lined Board | | | 45.00 |
| Single White, Patent Coated Newsboard Bender | 52.50 | @ | 57.50 |
| Wood Pulp Board | 70.00 | @ | 80.00 |
| Binder Boards | 80.00 | @ | 85.00 |
| (F. o. b. Mill) | 70.00 | @ | 75.00 |
| Tarred Felts— | | | |
| Regular, carload lots | 65.00 | @ | — |

### Old Papers

(F. o. b. Boston)

| | | | |
|---|---|---|---|
| Shavings— | | | |
| No. 1 Hard White | 3.25 | @ | 3.75 |
| No. 2 Hard White | 2.60 | @ | 2.90 |
| No. 1 Soft White | 2.60 | @ | — |
| No. 1 Mixed | 1.10 | @ | 1.15 |
| No. 2 Mixed | .85 | @ | .90 |
| Solid Ledger Stock | 2.35 | @ | 2.45 |
| No. 1 Books, Heavy | 1.45 | @ | 1.55 |
| No. 1 Books, Light | — | @ | 1.15 |
| Manila Env. Cuttings | 2.00 | @ | 2.25 |
| No. 1 Old Manila | 1.20 | @ | 1.25 |
| White Blank News | 1.55 | @ | 1.65 |
| Old Kraft | 2.00 | @ | 2.10 |
| Print Manila | .80 | @ | .90 |
| No. 1 Mixed Paper | — | @ | .65 |
| Overissue News | .70 | @ | .80 |
| Old Newspapers | .65 | @ | .67½ |
| Box Board, Chip | .65 | @ | — |

### Bagging

(Price f. o. b. Boston)

| | | | |
|---|---|---|---|
| Gunny No. 1— | | | |
| Foreign | — | @ | 1.60 |
| Manila Rope— | | | |
| Foreign | 3.25 | @ | 3.50 |
| Domestic | 3.25 | @ | 3.50 |
| Mixed Strings | .90 | @ | 1.00 |
| Scrap Burlaps | 1.45 | @ | 1.50 |
| Scrap Sisal | 1.25 | @ | 1.50 |
| Scrap Sisal for shredding | 1.50 | @ | 1.65 |
| Wool Tares, heavy | — | @ | 1.50 |
| New Burlap Cutting | 2.00 | @ | 2.25 |

### Domestic Rags (New)

(Price f. o. b. Boston)

| | | | |
|---|---|---|---|
| Shirt Cuttings— | | | |
| New White No. 1 | .09 | @ | .10 |
| Silesias, No. 1 | .06 | @ | .06½ |
| New Unbleached | .09½ | @ | .10 |
| Fancy | .04 | @ | .04½ |
| Washable | .04 | @ | .04½ |
| Cottons—According to grades | | | |
| Blue Overalls | .06 | @ | .06½ |
| New Black, soft | .04 | @ | .04½ |
| Khaki Cuttings | .04 | @ | .04½ |
| Corduroy | .03 | @ | .03½ |
| New Canvas | .08 | @ | .08¼ |

### Domestic Rags (Old)

(Price f. o. b. Boston)

| | | | |
|---|---|---|---|
| Canvas | .04½ | @ | — |
| White No. 1— | | | |
| Repacked | 4.75 | @ | 5.25 |
| Miscellaneous | 5.00 | @ | — |
| White No. 2— | | | |
| Repacked | .04½ | @ | .05 |
| Miscellaneous | .03½ | @ | .04 |
| Thirds and Blues— | | | |
| Repacked | 2.00 | @ | 2.15 |
| Miscellaneous | 1.75 | @ | 1.90 |
| Roofing Stock— | | | |
| No. 1 | 1.75 | @ | 1.85 |
| No. 2 | 1.45 | @ | 1.55 |
| No. 3 | 1.05 | @ | 1.10 |
| No. 4 | 1.10 | @ | 1.15 |

### Foreign Rags

(F. o. b. Boston)

| | | | |
|---|---|---|---|
| Dark Cottons | 1.62½ | @ | 1.65 |
| New No. 1 Shirt Cuttings | 9.00 | @ | 10.00 |
| Dutch Blues | 2.00 | @ | 2.12½ |
| Lace Curtains | 5.00 | @ | 5.50 |
| New Checks & Blues | 4.50 | @ | 4.65 |
| Old Fustians | 1.90 | @ | — |

## TORONTO

### Paper

(F. o. b. Mill)

| | | | |
|---|---|---|---|
| Bond— | | | |
| No. 1 Sulphite | .12½ | @ | — |
| No. 2 Sulphite | .10¾ | @ | — |
| No. 1 Colored | .13½ | @ | — |
| No. 2 Colored | .11¼ | @ | — |
| Ledgers (sulphite) | — | @ | — |
| Ledgers, No. 1 | .36 | @ | — |
| Ledgers, No. 2 | .27 | @ | — |
| Writing | .09½ | @ | .10 |
| News f. o. b. Mills— | | | |
| Rolls (carloads) | 3.25 | @ | — |
| Sheets (carloads) | 3.75 | @ | — |
| Sheets (2 tons or over) | 4.00 | @ | — |
| Book— | | | |
| No. 1 M. F. (carloads) | 7.50 | @ | — |
| No. 2 M. F. (carloads) | 7.25 | @ | — |
| No. 3 M. F. (carloads) | 7.00 | @ | — |
| No. 1 S. C. (carloads) | 8.00 | @ | — |
| No. 2 S. C. (carloads) | 7.75 | @ | — |
| No. 3 S. C. (carloads) | 7.50 | @ | — |
| No. 1 Coated and Litho | 14.50 | @ | — |
| No. 2 Coated and Litho | 13.50 | @ | — |
| No. 3 Coated and Litho | 12.75 | @ | — |
| Coated tinted | .15 | @ | — |
| Wrapping— | | | |
| Rag Brown | 4.95 | @ | — |
| White Wrap | 5.25 | @ | — |
| "B" Manila | 5.80 | @ | — |
| No. 1 Manila | 6.65 | @ | — |
| Fiber | 6.65 | @ | — |
| Kraft, M. F. | 7.00 | @ | — |
| M. G. | 7.00 | @ | — |

### Pulp

(F. o. b. Mill)

| | | | |
|---|---|---|---|
| Ground Wood | 30.00 | @ | 31.00 |
| Sulphite easy bleaching | 62.00 | @ | — |
| Sulphite news grade | 62.00 | @ | — |
| Sulphite, bleached | 75.00 | @ | — |
| Sulphate | 63.00 | @ | — |

### Old Waste Paper

(In carload lots, f. o. b. Toronto)

| | | | |
|---|---|---|---|
| Shavings— | | | |
| White Env. Cut | 3.00 | @ | — |
| Soft White Book Shavings | 2.85 | @ | — |
| White Blk, News | 1.50 | @ | — |
| Book and Ledger— | | | |
| Flat Magazine and Book Stock (old) | 1.40 | @ | — |
| Light and Crumpled Book Stock | 1.25 | @ | — |
| Ledgers and Writings | 1.50 | @ | — |
| Solid Ledgers | 1.50 | @ | — |
| Manilas— | | | |
| New Manila Cut | 1.50 | @ | — |
| Printed Manilas | 1.00 | @ | — |
| Kraft | 2.25 | @ | — |
| News and Scrap— | | | |
| Strictly Overissue | .80 | @ | — |
| Strictly Folded | .80 | @ | — |
| No. 1 Mixed Paper | .65 | @ | — |

### Domestic Rags

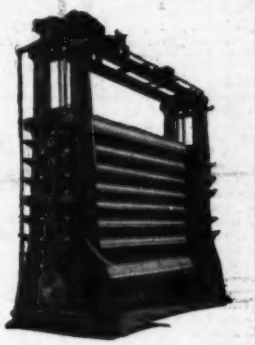
(Price to mills, f. o. b. Toronto)

| | | | |
|---|---|---|---|
| No. 1 White Shirt Cuttings | .11½ | @ | — |
| Fancy Shirt Cuttings | .05½ | @ | — |

# LOBDELL

**Chilled Iron Calender and Press Rolls**
**Automatic Roll Grinding Machines**
**Improved Micrometer Roll Calipers**

**LOBDELL CAR WHEEL COMPANY**
*Established 1836*
**WILMINGTON, DELAWARE.**



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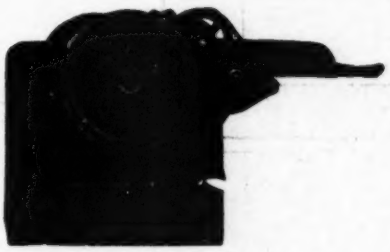
GIANT

# RAG CUTTERS



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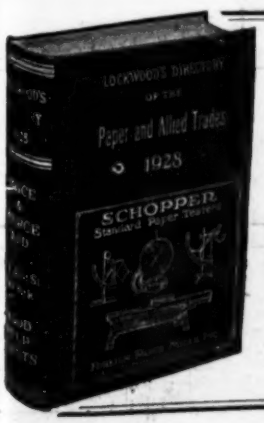


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# Paper Mill Stocks and Bonds

Quoted by Taylor & White, 45 Wall street, New York City, to whom all inquiry for quotations on these or any other Securities is referred.

| BONDS | BID | ASKED |
|---|---|---|
| Abitibi Power & Paper 5s, 1943 | 90 | 91 |
| Abitibi Power & Paper 6s, serially to 1934 | 100 | 102 |
| American Writing Paper 6s, 1947 | 81 | 87 |
| Bastrop Pulp & Paper 6½s, 1940 | 103 | 105½ |
| Bedford Pulp & Paper 6½s, 1942 | 97 | 100 |
| Beigo-Canadian Paper 6s, 1943 | 100 | 103 |
| British-Columbia Pulp & Paper 6s, 1950 | 89 | 92 |
| Brown Paper Mills Serial 6s, 1941 | 97 | 100 |
| Brown Company 5½s, 1946 | 98 | 101 |
| Bryant Paper 6s, 1942 | 98 | 101½ |
| Canadian Paper Board 7s, 19337 | 97 | 99½ |
| Cape Breton Pulp & Paper 6s, 1932 | 103 | ... |
| Celotex Company 6s, 1929 | 95 | 99 |
| Celotex Company 6½s, 1939 | 100 | 102 |
| Celotex Company of Chicago, Debenture 6s, 1936 | 95 | 98 |
| Central Paper Company Serial 6½s, 1942 | 86 | 89 |
| Central Paper 7s, 1934 | 78 | ... |
| Champion Coated Paper Serial 6½s, 1934 | 100 | ... |
| Champion Coated Fibre Notes 6s, 1941 | 100 | 102 |
| Champion Fibre Notes 6s, 1941 | 100 | 102 |
| Champion Fibre Notes 8s, 1930 | 95 | ... |
| Champion Paper Corp. 6s, 1945 | 95 | 98 |
| Container Corp. of America Debenture 6s, 1936, ex-warrants | 101 | 104 |
| Continental Paper Products 6½s, 1943 | 90 | 99 |
| Cornell Wood Products 7½s, 1937 | 103 | ... |
| Crown Willamette 6s, 1951 | 101 | 102 |
| Dells Paper & Pulp Serial 6s, 1938 | 95 | 98 |
| Dixon Board Mills Serial 6s, 1942 | 80 | ... |
| Donnaconna Paper 5½s, 1948 | 93 | ... |
| Eastern Manufacturing Co. 7s, 1938 | 97 | 100 |
| Escanaba Paper Serial 6s, 1939 | 98 | 100 |
| Escanaba Paper 6½s, 1935 | 96 | 99 |
| Filer Fibre Serial 7s, 1935 | 90 | 95 |
| Fort Irange Paper 7s, 1942 | 101 | ... |
| Fort William Paper 6s, 1946 | 100 | 104 |
| Fraser Company 6s, 1950 | 103 | 105 |
| Hammermill Paper Serial 6s, 1939 | 100 | ... |
| Hawley Pulp & Lumber 6s, 1946 | 96 | ... |
| Hawthorne Paper Company 6s, 1937 | 80 | ... |
| Hoberg Paper & Fibre 7s, 1937 | 94 | 97 |
| Industrial Fibre Corp. Debenture 8s, 1933 | 100 | ... |
| International Paper 6s, 1955 | 102 | 103 |
| International Paper 5s, 1947 | 98 | 100 |
| Itasca Paper & Prairie River Power Serial 5½s, 1938 | 99½ | ... |
| Itasca Paper & Prairie River Power Serial 6s, 1938 | 99 | ... |
| Jessup & Moore First 6s, 1945 | 83 | 90 |
| Kalamazoo Vegetable Parchment 6s, 1938 | 99 | 101 |
| Lake Superior Paper 6s, 1941 | 105 | 108 |
| Marathon Paper Mills Serial 5½s, 1942 | 99 | 101 |
| Marinette & Menominee 7½s, 1936 | 103 | 105 |
| Mead Pulp & Paper 5% Notes Serially, 1937 | 95 | 100 |
| Mead Fibre 7s, 1937 | 97 | 101 |
| Minnesota Ontario Paper Serial 6s, 1945 | 97½ | 100 |
| Murray Bay Paper Serial 6½s, 1947 | 102 | 105 |
| Munissing Paper Serial 6s, 1936 | 98 | ... |
| Nekoosa Edwards Paper 6s, 1928-42 | 96 | ... |
| Ontario Pulp & Paper 6s, 1931 | 108½ | 110½ |
| Orono Pulp & Paper 6s, 1943 | 99 | ... |
| Orono Pulp & Paper 5s, 1941 | 96½ | ... |
| Oswego Falls Corp. 6s, 1941 | 99 | 102 |
| Parker-Young Company 6½s, 1944 | 98 | 100 |
| Paterson Parchment Paper 6s, 1938 | 101 | 103 |
| Penobscot Chemical Fibre 6s, 1942 | 102 | 105 |
| Port Alfred Pulp & Paper 5½s, 1947 | 98 | 100 |
| Price Brothers 6s, 1943 | 105 | ... |
| Provincial Paper 5½s, 1947 | 98½ | ... |
| Queen City Paper 7s, 1933 | 98 | ... |
| River Raisin Paper 6s, 1936 | 98 | 100 |
| Riordan Pulp & Paper 6s, 1942 | 102 | 104 |
| Rolland Paper 6s, 1937 | 99 | 101 |
| St. Croix Paper Serial 5s, 1937 | 99 | ... |
| St. Helen Pulp & Paper 6½s, 1931 | 99 | 102 |
| St. Maurice Valley Corp. 6s, 1945 | 101 | 104 |
| St. Maurice Valley Corp. 5½s, 1947 | 98½ | 100½ |
| St. Regis Paper of Canada 6s, 1931 | 100 | 101½ |
| St. Regis Paper of Canada 6½s, 1934 | 100 | 102 |
| Smith (Howard) Paper Mills 7s, 1941 | 104 | 106 |
| Spanish River Pulp & Paper 6s, 1931 | 108 | 110 |
| Stevens-Thompson Paper 6s, 1942 | 94 | 96 |
| Taggart Brothers 6s, 1944 | 95 | 100 |
| Tait Paper & Color Industries 6s, 1934 | 88 | 92 |
| Ticonderoga Pulp & Paper 5s, 1930 | 94 | ... |
| Ticonderoga Pulp & Paper 6s, 1940 | 100 | 102 |
| Tomahawk Kraft Paper 6s, 1938 | 98 | ... |
| Tomahawk Pulp Paper 7s, 1932 | 99 | ... |
| Tonawanda Paper 5½s, Series 1941 | 99 | 102 |
| Union Bag & Paper Power 6s, 1932 | 98 | 100 |
| United Wall Paper Factories 6s, 1947 | 96 | 99 |
| Warren (S. D.) Company 6s, 1945 | 103 | 105 |
| Watab Paper 6½s, 1942 | 101 | 103½ |
| Waterway Paper Products 6s, 1931 | 100 | 101½ |
| Wayagamack Pulp & Paper 6s, 1951 | 103 | 105 |
| Westfield River Paper Serial 7s, 1943 | 89 | 93 |
| Whitmer-Parson Pulp & Lumber 8s, 1938 | 20 | 25 |
| Whitaker Paper 7s, 1942 | 108 | 110 |

| STOCKS | BID | ASKED |
|---|---|---|
| American Box Board, Pfd. | 9¼ | 10¼ |
| American Box Board, Com. | 9¼ | 10¼ |
| Am. Tissue Mills, 7% Pfd. | 90 | 93 |
| British Columbia P. & P. Pfd. | 65 | 75 |
| Brompton Pulp & Paper, 8% Pfd. | 100 | ... |
| Champion Fibre, 7% Ffd. | 108 | 110 |
| Diem & Wing, 7% Pfd. | 92 | 97 |
| Eastern Mfg. Co. 1st Pfd. | 55 | ... |
| Great Northern Paper, Com. | 75 | 78 |
| Hammermill Paper, new 6% Pfd. | 100 | ... |
| Hinde & Dauch, Com. | 125 | None Off. |
| Hinde & Dauch, 6% Pfd. | 102 | None Off. |
| Holyoke Card & Paper | 160 | None Off. |
| Marathon Paper Mills, Com. | 150 | ... |
| Mengel Co., Pfd. | 102 | 104 |
| Midwest Box Co., 8% Pfd. | 98 | 102 |
| Midwest Box Co., 6% Pfd. | 95 | 99 |
| Louis De Jonge Co., 7% Pfd. | 94 | 97 |
| Oxford Papers, Com. | 195 | ... |
| Oxford Paper Co., Pfd. | 108 | 111 |
| Penobscot Chemical Fibre, Com. | 80 | ... |
| Richardson Co., Com. | 170 | ... |
| Rubberoid | 95 | 101 |
| Sabin Robbins Paper Co., 8% Pfd. | 105 | 110 |
| St. Croix Paper | 155 | ... |
| St. Regis Paper Co., 7% Cum. Pfd. | 105 | 108 |
| Westfield River Paper Co., 1st Pfd. | Wanted | None Off. |
| West Virginia Pulp and Paper Company | 55 | 57 |
| West Virginia Pulp and Paper, Pfd. | 100 | 103 |
| Whittaker Paper, 7% Cum. Pfd. | 105 | None Off. |

## Leaves Kalamazoo Label Co.

KALAMAZOO, Mich., September 24, 1928.—George O. Frie, secretary of the Kalamazoo Label Company and widely and favorably known in the paper trade, leaves with his family Sunday for Portland, Ore., where he intends to continue in the label and specialty business, confining his activities to the Pacific Coast trade.

He has been a resident of Kalamazoo since boyhood. For 12 years he was connected with the Kalamazoo Stationery Company and for the past three years he has been associated with J. J. Murray at the Kalamazoo Label Company. During that period he has built up a wide acquaintance in his field.

He plans to motor through with his family, taking the southern route, which will include a trip through California. His successor has not been named as yet, but Mr. Murray is now in correspondence with several competent men in the trade and one of these will be selected.

Business continues good at the Kalamazoo Label Company and has improved steadily. During the past twelve months considerable new equipment has been added to the plant, which has materially increased production.

## Sales Conferences at Holyoke

HOLYOKE, Mass., September 25, 1928.—The annual sales conferences of the American Writing Paper Company and of the associated mills of the Crocker McElwain Company and Chemical Paper Manufacturing Company opened yesterday and will continue through part of the week.

The American Writing Paper Company will have present the branch office managers and sales from a dozen cities for a four days' conference. Among the larger cities represented will be New York, Philadelphia, Chicago, St. Louis, Cincinnati, Buffalo, Atlanta, Dallas and San Francisco.

Monday and Tuesday these sales meetings will take place in the general office building of the company with midday luncheon at the Hotel Nonotuck. On Wednesday the Eagle A sales organization will welcome the Eagle A distributors and selling agents from all over the world and join them in holding the annual Eagle A distributors sales conferences Wednesday and Thursday at the Hotel Nonotuck.

## Manning Association Has Outing

TROY, N. Y., September 22, 1928.—The fourth annual outing of the Manning Welfare Association was held Labor Day with more than 600 employees and officials of the company in attendance. The affair was a success in every way being favored by good weather All three mills of the company, the Mt. Ida mill in this city, the Green Island mill and the Behr-Manning plant in Watervliet, had large delegations at the outing. Andrew White was master of ceremonies. The program included a baseball game between Watervliet and Green Island plants which was won by the latter, and numerous other sports events between representatives of the three plants.

The committee in charge of the affair included Henry Nelson, of the Watervliet plant, Joe Walkinshaw, of the Green Island factory, and William Shackett of the Mt. Ida mill. The Manning syncopators and entertainers furnished the music.

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# PAPER TRADE JOURNAL
ESTABLISHED 1872

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FIFTY-SEVENTH YEAR

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